# KIT SAFETY DATA SHEET



**Kit Product Name** Autoimmune EIA Anti-ScI-70 Test

96SC Kit Catalogue Number(s)

**Revision date** 02-Apr-2024

# **Kit Contents**

Catalogue Number(s)	Product Name
200SC, 210SC	Anti-Scl-70 Pos. Control, Anti-Scl-70 Calib.
220NC, 220ND	Negative Control
220HSP, 220HAN, 220HDS, 220HCE, 220HSS	Conjugate
230AW	Wash Concentrate
230AD	Sample Diluent
220TM	Substrate
220SM	Stop Solution

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# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 02-Apr-2024 Revision Number 1.1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name Anti-Scl-70 Pos. Control, Anti-Scl-70 Calib.

Catalogue Number(s) 200SC, 210SC

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In-vitro laboratory reagent or component

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group 4000 Alfred Nobel Drive Hercules, California 94547

USA

**Legal Entity / Contact Address** 

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

**Technical Service** 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### 2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### **Hazard statements**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

### 2.3. Other hazards

Contains animal source material. (Goat).

Contains human source material and / or potentially infectious components

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
		number	Index No)	to Regulation (EC) No.	concentration		(long-term)
				1272/2008 [CLP]	limit (SCL)		
1,2,3-Propanetriol	50 - 100	Not available	200-289-5	Not classified	-	-	-
56-81-5							

#### Full text of H- and EUH-phrases: see section 16

### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
1,2,3-Propanetriol 56-81-5	12600	10000	2.75	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Inhalation Remove to fresh air.

Contains human source material and / or potentially infectious components. Call a doctor. Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

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**Skin contact** Wash with soap and water.

Ingestion Contains human source material and / or potentially infectious components. Call a doctor.

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**Contains human source material and / or potentially infectious components.

# **SECTION 5: Firefighting measures**

5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

#### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

6.2. Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

**Methods for containment** Do not allow into any sewer, on the ground or into any body of water.

**Methods for cleaning up**Use:. Disinfectant. Clean contaminated surface thoroughly.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# **SECTION 7: Handling and storage**

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7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

**General hygiene considerations** Follow universal and standard precautions for handling potentially infectious materials.

7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

### **Exposure Limits**

Chemical name	European Union	Austria	Belgium	Bu	Igaria	Croatia
1,2,3-Propanetriol 56-81-5	•	-	TWA: 10 mg/m <sup>3</sup>		-	TWA: 10 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Es	tonia	Finland
1,2,3-Propanetriol 56-81-5	-	TWA: 10 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup>	-	TWA:	10 mg/m <sup>3</sup>	TWA: 20 mg/m <sup>3</sup>
Chemical name	France	Germany TRGS	Germany DFG	Gr	eece	Hungary
1,2,3-Propanetriol	TWA: 10 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA:	10 mg/m <sup>3</sup>	-
56-81-5	-		Peak: 400 mg/m <sup>3</sup>		_	
Chemical name	Luxembourg	Malta	Netherlands	No	orway	Poland
1,2,3-Propanetriol 56-81-5	-	-	-		-	TWA: 10 mg/m <sup>3</sup>
Chemical name	Portugal	Romania	Slovakia	Slo	venia	Spain
1,2,3-Propanetriol 56-81-5	TWA: 10 mg/m <sup>3</sup>	-	TWA: 11 mg/m <sup>3</sup>		200 mg/m <sup>3</sup> 400 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Chemical name Sv		weden	Switzerland		Uni	ted Kingdom
1,2,3-Propanetriol 56-81-5		-	TWA: 50 mg/m STEL: 100 mg/n		TWA: 10 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup>	

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

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Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Follow universal and standard precautions for handling potentially infectious materials.

No information available. **Environmental exposure controls** 

### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Physical state Liquid

aqueous solution **Appearance** 

Colour white Odour Odourless.

**Odour threshold** No information available

**Property** Values Remarks • Method

No data available Melting point / freezing point None known

Initial boiling point and boiling range> 100 °C

Flammability No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point > 160 °C

**Autoignition temperature** 

**Decomposition temperature** None known

No data available

No data available None known Hq No data available No information available

pH (as aqueous solution) Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Water solubility Miscible in water

Solubility(ies) No data available None known **Partition coefficient** No data available None known Vapour pressure No data available None known Relative density No data available None known

**Bulk density** No data available

**Liquid Density** No data available

Relative vapour density No data available None known

Particle characteristics

No information available **Particle Size Particle Size Distribution** No information available

#### 9.2. Other information

#### 9.2.1. Information with regards to physical hazard classes

Not applicable

### 9.2.2. Other safety characteristics

No information available

# **SECTION 10: Stability and reactivity**

10.1. Reactivity

No information available. Reactivity

10.2. Chemical stability

Stable under normal conditions. Stability

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**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions 
Avoid contact with metals. This product contains Sodium azide. Sodium azide can react with

Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic

gases

10.4. Conditions to avoid

**Conditions to avoid**None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Metals.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Information on likely routes of exposure

#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

**Acute toxicity** 

**Numerical measures of toxicity** 

No information available

### **Component Information**

Chemical name Oral LD50		Dermal LD50	Inhalation LC50
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation**No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

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**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

12.1. Toxicity

**Ecotoxicity** Harmful to aquatic life.

**Unknown aquatic toxicity**Contains 0.001 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
		Oncorhynchus mykiss)		

### 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

**Component Information** 

Chemical name	Partition coefficient		
1,2,3-Propanetriol	-1.75		

### 12.4. Mobility in soil

**Mobility in soil** No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

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Chemical name	PBT and vPvB assessment
1,2,3-Propanetriol	The substance is not PBT / vPvB

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Flush pipes with water frequently if discarding solutions

containing Sodium azide into metal piping systems.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

ı	A	Т	Α

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

#### IMDG

14.1 UN number or ID numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

14.7 Maritime transport in bulk No information available

according to IMO instruments

#### RID

14.1UN numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

#### ADR

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special Precautions for Users

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Special Provisions None

# **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### **Persistent Organic Pollutants**

Not applicable

#### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

# **SECTION 16: Other information**

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Classification procedure					
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used				
Acute oral toxicity	Calculation method				
Acute dermal toxicity	Calculation method				
Acute inhalation toxicity - gas	Calculation method				
Acute inhalation toxicity - vapour	Calculation method				
Acute inhalation toxicity - dust/mist	Calculation method				
Skin corrosion/irritation	Calculation method				
Serious eye damage/eye irritation	Calculation method				
Respiratory sensitisation	Calculation method				
Skin sensitisation	Calculation method				
Mutagenicity	Calculation method				

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Carcinogenicity	Calculation method
9 3	
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision Note** Reformatted and updated existing information.

Revision date 02-Apr-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 02-Apr-2024 Revision Number 1.1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name Negative Control

Catalogue Number(s) 220NC, 220ND

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In-vitro laboratory reagent or component

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group 4000 Alfred Nobel Drive

Hercules, California 94547

USA

**Legal Entity / Contact Address** 

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

**Technical Service** 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### 2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### **Hazard statements**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### 2.3. Other hazards

Contains animal source material. (Goat).

Contains human source material and / or potentially infectious components

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

	Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
-			number	Index No)	to Regulation (EC) No.	concentration		(long-term)
					1272/2008 [CLP]	limit (SCL)		
ſ	1,2,3-Propanetriol	20 - 35	Not available	200-289-5	Not classified	-	-	-
	56-81-5							

### Full text of H- and EUH-phrases: see section 16

#### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
1,2,3-Propanetriol 56-81-5	12600	10000	2.75	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

**Inhalation** Remove to fresh air.

**Eye contact** Contains human source material and / or potentially infectious components. Call a doctor.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

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Negative Control Revision date 02-Apr-2024

**Skin contact** Wash with soap and water.

Ingestion Contains human source material and / or potentially infectious components. Call a doctor.

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**Contains human source material and / or potentially infectious components.

# **SECTION 5: Firefighting measures**

5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

#### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

6.2. Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

**Methods for containment** Do not allow into any sewer, on the ground or into any body of water.

Methods for cleaning up Use:. Disinfectant. Clean contaminated surface thoroughly.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# **SECTION 7: Handling and storage**

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7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

**General hygiene considerations** Follow universal and standard precautions for handling potentially infectious materials.

7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

### **Exposure Limits**

Chemical name	European Union	Austria	Belgium	Bu	Igaria	Croatia
1,2,3-Propanetriol 56-81-5	•	-	TWA: 10 mg/m <sup>3</sup>		-	TWA: 10 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Es	tonia	Finland
1,2,3-Propanetriol 56-81-5	-	TWA: 10 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup>	-	TWA:	10 mg/m <sup>3</sup>	TWA: 20 mg/m <sup>3</sup>
Chemical name	France	Germany TRGS	Germany DFG	Gr	eece	Hungary
1,2,3-Propanetriol	TWA: 10 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA:	10 mg/m <sup>3</sup>	-
56-81-5	-		Peak: 400 mg/m <sup>3</sup>		_	
Chemical name	Luxembourg	Malta	Netherlands	No	orway	Poland
1,2,3-Propanetriol 56-81-5	-	-	-		-	TWA: 10 mg/m <sup>3</sup>
Chemical name	Portugal	Romania	Slovakia	Slo	venia	Spain
1,2,3-Propanetriol 56-81-5	TWA: 10 mg/m <sup>3</sup>	-	TWA: 11 mg/m <sup>3</sup>		200 mg/m <sup>3</sup> 400 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Chemical name	S	weden	Switzerland		Uni	ted Kingdom
1,2,3-Propanetriol 56-81-5		-	TWA: 50 mg/m STEL: 100 mg/n			A: 10 mg/m <sup>3</sup> EL: 30 mg/m <sup>3</sup>

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection**Wear suitable protective clothing.

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exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Follow universal and standard precautions for handling potentially infectious materials.

**Environmental exposure controls** No information available.

### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Physical state Liquid

**Appearance** aqueous solution

ColourwhiteOdourOdourless.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting point / freezing point No data available None known

Initial boiling point and boiling range> 100 °C

Flammability No data available None known Flammability Limit in Air No hone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point > 160 °C

Autoignition temperatureNo data availableNone knownDecomposition temperatureNone known

**pH** No data available None known

pH (as aqueous solution) No data available No information available

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Water solubility Miscible in water

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density
No data available
Liquid Density
No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle SizeNo information availableParticle Size DistributionNo information available

#### 9.2. Other information

#### 9.2.1. Information with regards to physical hazard classes

Not applicable

# 9.2.2. Other safety characteristics

No information available

# **SECTION 10: Stability and reactivity**

10.1. Reactivity

**Reactivity** No information available.

10.2. Chemical stability

**Stability** Stable under normal conditions.

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**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

**Conditions to avoid**None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Information on likely routes of exposure

#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

Acute toxicity

**Numerical measures of toxicity** 

No information available

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat)4 h

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** No information available.

Serious eye damage/eye irritation No information available.

**Respiratory or skin sensitisation** No information available.

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**Negative Control** 

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Germ cell mutagenicity No information available.

**Carcinogenicity** No information available.

Reproductive toxicity No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

**12.1. Toxicity** 

**Ecotoxicity** Harmful to aquatic life.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
		Oncorhynchus mykiss)		

### 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** 

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.75

# 12.4. Mobility in soil

Mobility in soil No information available.

### 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
---------------	-------------------------

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1,2,3-Propanetriol The substance is not PBT / vPvB

#### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

14.1 UN number or ID numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

### **IMDG**

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

**14.7** Maritime transport in bulk No information available

according to IMO instruments

### RID

14.1 UN numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

#### ADR

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

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# **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### **Persistent Organic Pollutants**

Not applicable

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

# **SECTION 16: Other information**

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method

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STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision Note** Reformatted and updated existing information.

Revision date 02-Apr-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 13-Nov-2023 Revision Number 1.4

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name Conjugate

**Catalogue Number(s)** 220HSP, 220HAN, 220HDS, 220HCE, 220HSS

Nanoforms Not applicable

Pure substance/mixture Mixture

Contains 3(2H)-Isothiazolone, 2-methyl-

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In-vitro laboratory reagent or component

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

**Corporate Headquarters** 

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group 4000 Alfred Nobel Drive

Hercules, California 94547

USA

**Legal Entity / Contact Address** 

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

**Technical Service** 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitisation Category 1A - (H317)

### 2.2. Label elements

Contains 3(2H)-Isothiazolone, 2-methyl-



Signal word Warning

#### **Hazard statements**

H317 - May cause an allergic skin reaction

### Precautionary Statements - EU (§28, 1272/2008)

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### 2.3. Other hazards

Contains animal source material. (Goat).

# **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
		number	Index No)	to Regulation (EC) No.	concentration		(long-term)
				1272/2008 [CLP]	limit (SCL)		
1,2,3-Propanetriol	0.3 - 0.99	Not available	200-289-5	Not classified	-	-	-
56-81-5							
Trade secret	0.01 -	Not available	Listed	Acute Tox. 3 (H301)	Skin Sens. 1A	10	1
	0.099			Acute Tox. 3 (H311)	:: C>=0.0015%		
				Acute Tox. 2 (H330)			
				Skin Corr. 1B (H314)			
				Eye Dam. 1 (H318)			
				Skin Sens. 1A (H317)			
				Aquatic Acute 1 (H400)			
				Aquatic Chronic 1			
				(H410)			
				(EUH071)			
Sodium chloride	0.001 -	Not available	231-598-3	Not classified	-	-	-

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7647-14-5	0.01			

#### Full text of H- and EUH-phrases: see section 16

### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
1,2,3-Propanetriol 56-81-5	12600	10000	2.75	No data available	No data available
Trade secret	232 120	200	No data available	No data available	No data available
Sodium chloride 7647-14-5	3550	10000	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a doctor.

**Skin contact** Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

**Ingestion** Rinse mouth.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

# 4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**May cause sensitisation in susceptible persons. Treat symptomatically.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards arising from the** Product is or contains a sensitiser. May cause sensitisation by skin contact.

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chemical

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

6.2. Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections**See section 8 for more information. See section 13 for more information.

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store according to

product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

### **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

#### **Exposure Limits**

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Chemical name	European Union	Austria	Belgium	Bul	Igaria	Croatia
1,2,3-Propanetriol 56-81-5	-	-	TWA: 10 mg/m <sup>3</sup>		-	TWA: 10 mg/m <sup>3</sup>
Trade secret	-	TWA: 0.05 mg/m³ Sh+	-		-	-
Chemical name	Cyprus	Czech Republic	Denmark	Es	tonia	Finland
1,2,3-Propanetriol 56-81-5	-	TWA: 10 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup>	-		10 mg/m <sup>3</sup>	TWA: 20 mg/m <sup>3</sup>
Chemical name	France	Germany TRGS	Germany DFG	Gr	eece	Hungary
1,2,3-Propanetriol 56-81-5	TWA: 10 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup> Peak: 400 mg/m <sup>3</sup>	TWA: ′	10 mg/m <sup>3</sup>	-
Trade secret	-	-	TWA: 0.2 mg/m <sup>3</sup> Peak: 0.4 mg/m <sup>3</sup> skin sensitizer		1	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Lá	atvia	Lithuania
Sodium chloride 7647-14-5	-	-	-	TWA:	5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Chemical name	Luxembourg	Malta	Netherlands	No	rway	Poland
1,2,3-Propanetriol 56-81-5	-	-	-		-	TWA: 10 mg/m <sup>3</sup>
Chemical name	Portugal	Romania	Slovakia	Slo	venia	Spain
1,2,3-Propanetriol 56-81-5	TWA: 10 mg/m <sup>3</sup>	-	TWA: 11 mg/m <sup>3</sup>		100 mg/m <sup>3</sup> 100 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Chemical name	S	weden	Switzerland		United Kingdom	
1,2,3-Propanetriol 56-81-5		-	TWA: 50 mg/m STEL: 100 mg/r	<sup>3</sup> TWA: 10 mg/m <sup>3</sup>		
Trade secret		-	S+ TWA: 0.2 mg/m STEL: 0.4 mg/n	a: 0.2 mg/m <sup>3</sup>		-

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

# **SECTION 9: Physical and chemical properties**

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#### Conjugate

9.1. Information on basic physical and chemical properties

Physical state Liquid

**Appearance** aqueous solution

Colour amber Odour Odourless.

No information available **Odour threshold** 

Property Values Remarks • Method

Melting point / freezing point No data available None known

Initial boiling point and boiling range 100 °C

**Flammability** No data available None known Flammability Limit in Air None known

Upper flammability or explosive

No data available

limits

Lower flammability or explosive No data available

limits

No data available None known Flash point

**Autoignition temperature** No data available **Decomposition temperature** 

None known

pH (as aqueous solution) No data available Kinematic viscosity No data available

None known None known

No information available

**Dynamic viscosity** No data available Water solubility Miscible in water

Solubility(ies) No data available **Partition coefficient** No data available Vapour pressure No data available Relative density No data available No data available **Bulk density** 

None known None known None known None known

**Liquid Density** No data available

Relative vapour density No data available None known

Particle characteristics

No information available **Particle Size Particle Size Distribution** No information available

#### 9.2. Other information

### 9.2.1. Information with regards to physical hazard classes

Not applicable

### 9.2.2. Other safety characteristics

No information available

# **SECTION 10: Stability and reactivity**

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

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### 10.5. Incompatible materials

**Incompatible materials**None known based on information supplied.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Information on likely routes of exposure

#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons (based on components).

**Ingestion** Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Itching. Rashes. Hives.

Acute toxicity

**Numerical measures of toxicity** 

No information available

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h	
Trade secret	Trade secret 232 - 249 mg/kg (Rat)		= 0.11 mg/L (Rat) 4 h	
	= 120 mg/kg (Rat)			
Sodium chloride	= 3550 mg/kg (Rat)	> 10000 mg/kg(Rabbit)	> 42 mg/L (Rat)1 h	

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation**No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitisation** May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

**Carcinogenicity** No information available.

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Reproductive toxicity No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available.

**Aspiration hazard** No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

12.1. Toxicity

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Unknown aquatic toxicity**Contains 0.94151 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
		Oncorhynchus mykiss)		
Sodium chloride	-	LC50: 5560 - 6080mg/L	-	EC50: =1000mg/L (48h,
		(96h, Lepomis		Daphnia magna)
		macrochirus)		EC50: 340.7 - 469.2mg/L
		LC50: =12946mg/L (96h,		(48h, Daphnia magna)
		Lepomis macrochirus)		
		LC50: 6020 - 7070mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: =7050mg/L (96h,		
		Pimephales promelas)		
		LC50: 6420 - 6700mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: 4747 - 7824mg/L	• • •	
		(96h, Oncorhynchus		
		mykiss)		

# 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

**Component Information** 

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### Conjugate

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.75
Trade secret	-0.26

#### 12.4. Mobility in soil

**Mobility in soil** No information available.

#### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
1,2,3-Propanetriol	The substance is not PBT / vPvB
Trade secret	The substance is not PBT / vPvB
Sodium chloride	The substance is not PBT / vPvB

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

#### IATA

14.1 UN number or ID numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

# <u>IMDG</u>

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special Precautions for Users

Special Provisions Non

**14.7 Maritime transport in bulk** No information available according to IMO instruments

#### RID

14.1 UN number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 Not regulated
 Not regulated
 Not regulated

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**14.4 Packing group 14.5 Environmental hazards**Not regulated
Not applicable

14.6 Special Precautions for Users

Special Provisions None

<u>ADR</u>

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated Not regulated Not applicable

14.6 Special Precautions for Users

Special Provisions None

# **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

#### **France**

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Sodium chloride	RG 78	-
7647-14-5		

#### Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

# **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorisation per	
	Annex XVII	REACH Annex XIV	
Trade secret -	Use restricted. See entry 75.	-	

### **Persistent Organic Pollutants**

Not applicable

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Plant Protection Products (1107/2009/EC)

EU - Plant Protection Products (1107/2009/EC)						
Chemical name	EU - Plant Protection Products (1107/2009/EC)					
Sodium chloride - 7647-14-5	Plant protection agent					

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Trade secret -	Product-type 11: Preservatives for liquid-cooling and
	processing systems Product-type 12: Slimicides
	Product-type 13: Working or cutting fluid preservatives
	Product-type 6: Preservatives for products during storage
Sodium chloride - 7647-14-5	Product-type 1: Human hygiene

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<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

### **SECTION 16: Other information**

#### Key or legend to abbreviations and acronyms used in the safety data sheet

### Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H330 - Fatal if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

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U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision Note** Reformatted and updated existing information.

Revision date 13-Nov-2023

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 02-Apr-2024 Revision Number 1.5

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name Wash Concentrate

Catalogue Number(s) 230AW

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In-vitro laboratory reagent or component

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group

4000 Alfred Nobel Drive Hercules, California 94547

USA

**Legal Entity / Contact Address** 

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

**Technical Service** 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### 2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### **Hazard statements**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### 2.3. Other hazards

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
		number	Index No)	to Regulation (EC) No.	concentration		(long-term)
				1272/2008 [CLP]	limit (SCL)		
Sodium chloride 7647-14-5	10 - 20	Not available	231-598-3	Not classified	-	-	-

#### Full text of H- and EUH-phrases: see section 16

### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

	Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
ш			mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
Ī	Sodium chloride 7647-14-5	3550	10000	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

**Inhalation** Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a doctor.

Skin contact In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and

water.

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**Ingestion** Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**Treat symptomatically.

# **SECTION 5: Firefighting measures**

5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

6.2. Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

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Advice on safe handling Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

### **Exposure Limits**

Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Sodium chloride	-	-	-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
7647-14-5					

### **Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

**Eye/face protection** No special protective equipment required.

**Skin and body protection**No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Physical state Liquid

**Appearance** aqueous solution

Colour white Odourless.

Odour threshold No information available

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#### **Wash Concentrate**

None known

Remarks • Method **Property** Values Melting point / freezing point No data available None known

Initial boiling point and boiling range> 100 °C

Flammability No data available None known None known

Flammability Limit in Air

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

No data available None known Flash point **Autoignition temperature** No data available None known **Decomposition temperature** None known

7.3

pH (as aqueous solution) No data available No information available None known

Kinematic viscosity No data available **Dvnamic viscosity** No data available Water solubility Miscible in water

Solubility(ies) No data available None known **Partition coefficient** No data available None known Vapour pressure No data available None known Relative density No data available None known

No data available **Bulk density** No data available **Liquid Density** 

Relative vapour density No data available None known

**Particle characteristics** 

**Particle Size** No information available **Particle Size Distribution** No information available

#### 9.2. Other information

### 9.2.1. Information with regards to physical hazard classes

Not applicable

### 9.2.2. Other safety characteristics

No information available

# **SECTION 10: Stability and reactivity**

10.1. Reactivity

No information available. Reactivity

10.2. Chemical stability

Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

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Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Information on likely routes of exposure

**Product Information** 

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

**Acute toxicity** 

### **Numerical measures of toxicity**

No information available

#### The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)** 25,431.70 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chloride	= 3550 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat) 1 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitisation** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

Reproductive toxicity No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available.

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#### **Wash Concentrate**

**Aspiration hazard** No information available.

11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

12.1. Toxicity

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium chloride	-	LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss)	-	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)

### 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment	
Sodium chloride	The substance is not PBT / vPvB	

# 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

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#### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

#### IATA

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special Precautions for Users

Special Provisions None

#### IMDG

14.1 UN number or ID numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

**14.7 Maritime transport in bulk** No information available

according to IMO instruments

#### RID

14.1UN numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

#### <u>ADR</u>

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special Precautions for Users

Special Provisions None

# **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

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### **France**

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Sodium chloride	RG 78	-
7647-14-5		

#### Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

#### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

### **Persistent Organic Pollutants**

Not applicable

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Sodium chloride - 7647-14-5	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Sodium chloride - 7647-14-5	Product-type 1: Human hygiene

International Inventories Contact supplier for inventory compliance status

### 15.2. Chemical safety assessment

Chemical Safety Report No information available

# **SECTION 16: Other information**

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method

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Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision Note** Reformatted and updated existing information.

Revision date 02-Apr-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 02-Apr-2024 Revision Number 1.1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name Sample Diluent

Catalogue Number(s) 230AD

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In-vitro laboratory reagent or component

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group 4000 Alfred Nobel Drive

Hercules, California 94547

USA

**Legal Entity / Contact Address** 

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

**Technical Service** 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

### 2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### **Hazard statements**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

### 2.3. Other hazards

Contains animal source material. (Goat).

# **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical name	Weight-%	REACH registration number	,	Classification according to Regulation (EC) No.		M-Factor	M-Factor (long-term)
		Humber	index No)	1272/2008 [CLP]	limit (SCL)		(long-term)
Sodium chloride 7647-14-5	1 - 2.5	Not available	231-598-3	Not classified	-	-	-

### Full text of H- and EUH-phrases: see section 16

#### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	nour - vapour - mg/L	hour - gas - ppm
Sodium chloride 7647-14-5	3550	10000	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

**Inhalation** Remove to fresh air.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a doctor.

Skin contact In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and

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water.

**Ingestion** Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**Treat symptomatically.

# **SECTION 5: Firefighting measures**

5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

6.2. Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **Exposure Limits**

Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Sodium chloride	-	-	-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
7647-14-5					

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Predicted No Effect Concentration No information available.

(PNEC)

8.2. Exposure controls

Personal protective equipment

**Eye/face protection** No special protective equipment required.

**Skin and body protection**No special protective equipment required.

exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution

Colour white Odour Odourless.

Odour threshold No information available

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None known

**Property** Values Remarks • Method

No data available Melting point / freezing point None known

Initial boiling point and boiling range> 100 °C

Flammability No data available Flammability Limit in Air None known

Upper flammability or explosive No data available

Lower flammability or explosive No data available

limits Flash point No data available None known **Autoignition temperature** No data available None known

**Decomposition temperature** None known 7.3

No data available pH (as aqueous solution) No information available

No data available None known Kinematic viscosity Dynamic viscosity No data available None known Water solubility Miscible in water

Solubility(ies) No data available None known **Partition coefficient** No data available None known Vapour pressure No data available None known

Relative density No data available None known **Bulk density** No data available **Liquid Density** No data available

Relative vapour density No data available None known

Particle characteristics No information available **Particle Size** 

No information available **Particle Size Distribution** 

### 9.2. Other information

#### 9.2.1. Information with regards to physical hazard classes

Not applicable

#### 9.2.2. Other safety characteristics

No information available

# **SECTION 10: Stability and reactivity**

10.1. Reactivity

No information available. Reactivity

10.2. Chemical stability

Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge

10.3. Possibility of hazardous reactions

Avoid contact with metals. This product contains Sodium azide. Sodium azide can react with Possibility of hazardous reactions

Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic

gases.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Metals. Incompatible materials

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### 10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Information on likely routes of exposure

#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

Acute toxicity

#### **Numerical measures of toxicity**

No information available

### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chloride	= 3550 mg/kg (Rat)	> 10000 mg/kg(Rabbit)	> 42 mg/L (Rat)1 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation**No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitisation** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available.

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**Aspiration hazard** No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

12.1. Toxicity

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium chloride	-	LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas)	- -	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)
		LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss)		

### 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

12.4. Mobility in soil

**Mobility in soil** No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment		
Sodium chloride	The substance is not PBT / vPvB		

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

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#### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Flush pipes with water frequently if discarding solutions

containing Sodium azide into metal piping systems.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

#### **IATA**

14.1 UN number or ID numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

#### IMDG

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

14.7 Maritime transport in bulk No information available according to IMO instruments

### RID

14.1UN numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

### ADR

14.1 UN number or ID numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

# **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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### National regulations

#### **France**

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Sodium chloride	RG 78	-
7647-14-5		

### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### **Persistent Organic Pollutants**

Not applicable

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Sodium chloride - 7647-14-5	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Sodium chloride - 7647-14-5	Product-type 1: Human hygiene

International Inventories Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

# **SECTION 16: Other information**

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method

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Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision Note** Reformatted and updated existing information.

Revision date 02-Apr-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 13-Nov-2023 Revision Number 1.3

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name Substrate

Catalogue Number(s) 220TM

Nanoforms Not applicable

Pure substance/mixture Mixture

Contains Methanol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In-vitro laboratory reagent or component

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

**Corporate Headquarters** 

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group 4000 Alfred Nobel Drive Hercules, California 94547

USA

**Legal Entity / Contact Address** 

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

**Technical Service** 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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Revision date 13-Nov-2023

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity — single exposure	Category 1

### 2.2. Label elements







Signal word Danger

### **Hazard statements**

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H370 - Causes damage to organs

EUH066 - Repeated exposure may cause skin dryness or cracking

# Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

### 2.3. Other hazards

# **SECTION 3: Composition/information on ingredients**

# 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemi	cal name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
			number	Index No)	to Regulation (EC) No.	concentration		(long-term)
					1272/2008 [CLP]	limit (SCL)		
Me	thanol	10 - 20	Not available	200-659-6	Acute Tox. 3 (H301)	STOT SE 1 ::	-	-
67	-56-1			(603-001-00	Acute Tox. 3 (H311)	C>=1%		
				-X)	Acute Tox. 3 (H331)			
					STOT SE 1 (H370)			

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				Flam. Liq. 2 (H225)			
Acetone 67-64-1	10 - 20	Not available	200-662-2 (606-001-00 -8)	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225) (EUH066)	-	1	1
Dimethyl sulfoxide 67-68-5	2.5 - 5	Not available	200-664-3	Not classified	-	-	-
[1,1-Biphenyl]-4,4-di amine, 3,3,5,5-tetramethyl- 54827-17-7	0.1 - 0.299	Not available	259-364-6	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	-	1	1
Hydrogen peroxide 7722-84-1	0.01 - 0.099	Not available	231-765-0 (008-003-00 -9)	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Eye Dam. 1 (H318) STOT SE 3 (H336) Ox. Liq. 1 (H271)	Eye Dam. 1 :: 8%<=C<50% Eye Irrit. 2 :: 5%<=C<8% Ox. Liq. 1 :: C>=70% Ox. Liq. 2 :: 50%<=C<70% Skin Corr. 1A :: C>=70% Skin Corr. 1B :: 20%<=C<70% STOT SE 3 :: C>=35%		-

### Full text of H- and EUH-phrases: see section 16

### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Methanol 67-56-1	6200	15840	No data available	41.6976	No data available
Acetone 67-64-1	5800	15700	100.2	No data available	No data available
Dimethyl sulfoxide 67-68-5	28300	40000	No data available	No data available	No data available
Hydrogen peroxide 7722-84-1	1518	9200	2	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If symptoms

persist, call a doctor. If breathing has stopped, give artificial respiration. Get medical

attention immediately.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a doctor. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if

irritation develops and persists.

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**Skin contact** Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a

doctor.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Get medical attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid breathing vapours or mists. Use personal protective equipment as required.

See section 8 for more information.

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing.

Difficulty in breathing.

4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**Treat symptomatically.

# **SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Avoid breathing

vapours or mists.

**Other information** Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

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Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Avoid breathing vapours or mists. In case of insufficient ventilation, wear

suitable respiratory equipment.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up. Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **Exposure Limits**

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Methanol	TWA: 200 ppm	TWA: 200 ppm	TWA: 200 ppm	TWA: 200 ppm	TWA: 200 ppm
67-56-1	TWA: 260 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>	TWA: 266 mg/m <sup>3</sup>	TWA: 260.0 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>
	*	STEL 800 ppm	STEL: 250 ppm	K*	*
		STEL 1040 mg/m <sup>3</sup>	STEL: 333 mg/m <sup>3</sup>		
		H*	D*		
Acetone	TWA: 500 ppm	TWA: 500 ppm	TWA: 246 ppm	STEL: 1400 mg/m <sup>3</sup>	TWA: 500 ppm
67-64-1	TWA: 1210 mg/m <sup>3</sup>	TWA: 1200 mg/m <sup>3</sup>	TWA: 594 mg/m <sup>3</sup>	TWA: 600 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>
		STEL 2000 ppm	STEL: 492 ppm		· ·
		STEL 4800 mg/m <sup>3</sup>	STEL: 1187 mg/m <sup>3</sup>		
Dimethyl sulfoxide	-	TWA: 50 ppm	-	-	-
67-68-5		TWA: 160 mg/m <sup>3</sup>			
		H*			
Hydrogen peroxide	-	TWA: 1 ppm	TWA: 1 ppm	TWA: 1.5 mg/m <sup>3</sup>	TWA: 1 ppm
7722-84-1		TWA: 1.4 mg/m <sup>3</sup>	TWA: 1.4 mg/m <sup>3</sup>	-	TWA: 1.4 mg/m <sup>3</sup>
		STEL 2 ppm			STEL: 2 ppm
		STEL 2.8 mg/m <sup>3</sup>			STEL: 2.8 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Methanol	*	TWA: 250 mg/m <sup>3</sup>	TWA: 200 ppm	TWA: 200 ppm	TWA: 200 ppm
67-56-1	TWA: 200 ppm	Ceiling: 1000 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>	TWA: 250 mg/m <sup>3</sup>	TWA: 270 mg/m <sup>3</sup>
	TWA: 260 mg/m <sup>3</sup>	D*	H*	STEL: 250 ppm	STEL: 250 ppm
	-		STEL: 400 ppm	STEL: 350 mg/m <sup>3</sup>	STEL: 330 mg/m <sup>3</sup>
			STEL: 520 mg/m <sup>3</sup>	A*	iho*
Acetone	*	TWA: 800 mg/m <sup>3</sup>	TWA: 250 ppm	TWA: 500 ppm	TWA: 500 ppm

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TWA: 1200 mg/m²   TWA: 1200 mg/m²   TWA: 1200 mg/m²   STEL: 1500 mg/						
Dimethyl sulfoxide   -	67-64-1		Ceiling: 1500 mg/m <sup>3</sup>		TWA: 1210 mg/m <sup>3</sup>	
Dimethyl sulfoxide   France		TWA: 1210 mg/m <sup>3</sup>		STEL: 500 ppm		STEL: 630 ppm
Dimethyl sulfoxide   France		_		STEL: 1200 mg/m <sup>3</sup>		STEL: 1500 mg/m <sup>3</sup>
TWA: 160 mg/m³   STEL: 150 ppm   STEL: 150 ppm   STEL: 150 ppm   STEL: 200 mg/m³   STEL: 150 ppm   STEL: 200 mg/m³   STEL: 1000 ppm   STEL: 360 mg/m³	Dimethyl sulfoxide	_	-	·	TWA: 50 ppm	
Hydrogen peroxide						
Hydrogen peroxide	0, 00 0					1110
Hydrogen peroxide						
Hydrogen peroxide   TWA: 1 mg/m²   STEL: 2 mg/m²   STEL: 3 m				STEL. 320 Hig/III	_	
Ceiling: 2 mg/m³   TWA: 1.4 mg/m³   STEL: 2 ppm   STEL: 2 ppm   STEL: 2 ppm   STEL: 2 ppm   STEL: 3 mg/m³	<del></del>		T14/4 4 / 2	T14/4		T10/0 4
Chemical name		-	I WA: 1 mg/m <sup>3</sup>			
Chemical name	7722-84-1		Ceiling: 2 mg/m <sup>3</sup>			
Methanol   TWA: 200 ppm   TWA: 100 ppm   TWA: 200						
Methanol   TWA: 200 ppm   TWA: 100 ppm   TWA: 200 ppm   TWA: 260 mg/m³					STEL: 3 mg/m <sup>3</sup>	STEL: 4.2 mg/m <sup>3</sup>
TWA: 260 mg/m³   STEL: 300 mg/m³   STEL: 325 m	Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Acetone   TWA: 500 ppm   TWA: 200 mg/m³   TWA: 500 ppm   TWA: 1210 mg/m³   TWA: 12	Methanol	TWA: 200 ppm	TWA: 100 ppm	TWA: 100 ppm	TWA: 200 ppm	TWA: 260 mg/m <sup>3</sup>
Acetone   TWA: 500 ppm   TWA: 200 mg/m³   TWA: 500 ppm   TWA: 1210 mg/m³   TWA: 12	67-56-1					
STEL: 320 mg/m³						
Acetone 67-64-1 TWA: 500 ppm TWA: 1200 mg/m³ STEL: 1000 ppm TWA: 1200 mg/m³ Peak: 1000 ppm Peak: 2400 mg/m³ Peak: 1000 ppm Peak: 220 mg/m³ Peak: 1000 ppm Peak: 220 mg/m³ STEL: 3						-
TWA: 1210 mg/m³   TWA: 1200 mg/m³   TWA: 1200 mg/m³   Peak: 1000 ppm   Peak: 2400 mg/m³   TWA: 1210 mg/m³   Peak: 1000 ppm   Peak: 2400 mg/m³   TWA: 1210		*		* *	*	
TWA: 1210 mg/m³   TWA: 1200 mg/m³   TWA: 1200 mg/m³   Peak: 1000 ppm   Peak: 2400 mg/m³   TWA: 1210 mg/m³   Peak: 1000 ppm   Peak: 2400 mg/m³   TWA: 1210	Acetono	T\\\\ A \cdot 500 ppm	T\//Δ · 500 ppm	T\\\\ A \cdot 500 ppm	T\//Δ· 1780 ma/m <sup>3</sup>	T\//Δ · 500 ppm
Dimethyl sulfoxide 67-68-5						
Dimethyl sulfoxide   G7-68-5   TWA: 50 ppm   TWA: 160 mg/m³   Peak: 200 ppm   TWA: 160 mg/m³   Peak: 100 ppm   Peak: 100 ppm   Peak: 200 mg/m³   Peak: 0.71 mg/m³   Peak: 0.71 mg/m³   Peak: 0.71 mg/m³   Peak: 0.71 mg/m³   TWA: 1.4 mg/m³   STEL: 3 mg/m³   TWA: 200 ppm   TWA: 260 mg/m³   TWA: 26	07-04-1		1 VVA. 1200 Hig/III°		STEL. 3300 Hig/III	1 VVA. 12 10 Hig/III°
Dimethyl sulfoxide   67-68-5   TWA: 160 mg/m³   TWA: 160 mg/m³   Peak: 100 ppm   Peak: 320 mg/m³   TWA: 1.5 mg/m³   TWA: 0.5 ppm   TWA: 0.71 mg/m³   TWA: 0.5 ppm   Peak: 0.5 ppm   TWA: 200 ppm   TWA: 260 mg/m³   STEL: 360 mg/m³   STEL: 360 ppm   STEL: 38 mg/m³   STEL: 300 ppm   TWA: 260 mg/m³   STEL: 300 ppm   TWA: 260 ppm   TWA: 260 mg/m³   STEL: 360 ppm   TWA: 260 ppm   TWA: 260 mg/m³   STEL: 360 ppm   TWA: 1210 mg/m³   STEL: 360 ppm   STEL: 360 ppm   STEL: 360 ppm   TWA: 1210 mg/m³   STEL: 187 mg/m³   STEL: 360 ppm   TWA: 1.5 mg/m³   STEL: 3 mg/m³						
TWA: 160 mg/m³   Peak: 100 ppm   Peak: 320 mg/m³   TWA: 1.5 mg/m³   TWA: 0.5 ppm   TWA: 0.5 ppm   TWA: 0.5 ppm   Peak: 0.71 mg/m³   Peak: 0.5 ppm   Peak: 0.71 mg/m³   STEL: 3 mg/m³		STEL: 2420 mg/m <sup>3</sup>				
Hydrogen peroxide   TWA: 1 ppm   TWA: 0.5 ppm   T		-			-	-
Hydrogen peroxide   TWA: 1 ppm   TWA: 0.5 ppm   TWA: 0.5 ppm   TWA: 0.71 mg/m³   Peak: 0.5 ppm   TWA: 1.4 mg/m³   STEL: 3 mg/m³   STEL: 360 mg/m³   STEL: 380 mg/m³   TWA: 260 mg/m³   TWA: 260 mg/m³   TWA: 260 mg/m³   TWA: 380 mg/m³	67-68-5		TWA: 160 mg/m <sup>3</sup>			
Hydrogen peroxide   TWA: 1,5 mg/m³   TWA: 0.5 ppm   TWA: 0.71 mg/m³   Peak: 0.5 ppm   TWA: 1,4 mg/m³   STEL: 3 mg/m³   STEL: 3 mg/m³   STEL: 300 ppm   TWA: 200 ppm   STEL: 780 mg/m³   STEL: 328 mg/m³   STEL: 3630 mg/m³   TWA: 2101 mg/m³   TWA: 250 ppm   TW			H*	Peak: 100 ppm		
TWA: 1.5 mg/m³				Peak: 320 mg/m <sup>3</sup>		
TWA: 1.5 mg/m³				*		
TWA: 1.5 mg/m³	Hydrogen peroxide	TWA: 1 ppm	TWA: 0.5 ppm	TWA: 0.5 ppm	TWA: 1 ppm	-
Peak: 0.5 ppm						
Peak: 0.71 mg/m³	1722 04 1	TWA. 1.5 mg/m	1 vv/ \. 0.7 1 111g/111			
Chemical name   Ireland   Italy MDLPS   Italy AIDII   Latvia   Lithuania					OTEL. Strig/ill	
Methanol   TWA: 200 ppm   TWA: 200 ppm   TWA: 260 mg/m³   STEL: 600 ppm   STEL: 600 ppm   STEL: 780 mg/m³   St*   STEL: 520 ppm   STEL: 328 mg/m³   Cute*   STEL: 328 mg/m³   Cute*   STEL: 328 mg/m³   STEL: 300 ppm   TWA: 250 ppm   TWA: 250 ppm   TWA: 500 ppm   TWA: 1210 mg/m³   STEL: 1500 ppm   STEL: 3630 mg/m³   STEL: 3630 mg/m³	01 1			Feak. 0.7 i mg/m°		
TWA: 260 mg/m³   STEL: 600 ppm   STEL: 600 ppm   STEL: 780 mg/m³   STEL: 250 ppm   TWA: 260 mg/m³   STEL: 210 mg/m³   STEL: 1210 mg/m³   STEL: 1210 mg/m³   STEL: 3630 mg/m³   STEL: 3630 mg/m³   STEL: 13630 mg/m³   STEL: 1187 mg/m³   STEL: 1187 mg/m³   STEL: 2420 mg/m³   STEL: 2420 mg/m³   STEL: 2420 mg/m³   STEL: 500 ppm   STEL: 5	I homical nama	Iroland	Italy MDLDS		Lotvio	Lithuania
STEL: 600 ppm   STEL: 780 mg/m³   STEL: 328 mg/m³   STEL: 329 mg/m³   STEL: 3500 ppm   TWA: 500 ppm   TWA: 500 ppm   TWA: 1210 mg/m³   STEL: 1500 ppm   STEL: 1500 ppm   STEL: 2420 mg/m³   STEL: 1187 mg/m³   STEL: 1187 mg/m³   STEL: 3630				Italy AIDII		
Acetone   TWA: 500 ppm   TWA: 1210 mg/m³   STEL: 3630 mg/m³   STEL: 36	Methanol	TWA: 200 ppm	TWA: 200 ppm	Italy AIDII TWA: 200 ppm	TWA: 200 ppm	O*
Acetone   TWA: 500 ppm   TWA: 500 ppm   TWA: 250 ppm   TWA: 250 ppm   TWA: 250 ppm   TWA: 210 mg/m³   STEL: 1500 ppm   STEL: 3630 mg/m³   STEL:	Methanol	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	Italy AIDII TWA: 200 ppm TWA: 262 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	O* TWA: 200 ppm
Acetone   TWA: 500 ppm   TWA: 500 ppm   TWA: 500 ppm   TWA: 594 mg/m³   STEL: 1500 ppm   STEL: 3630 mg/m³	Methanol	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 600 ppm	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	O* TWA: 200 ppm
TWA: 1210 mg/m³   STEL: 1500 ppm   STEL: 3630 mg/m³   STEL: 3630 mg/	Methanol	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 600 ppm STEL: 780 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	O* TWA: 200 ppm
STEL: 1500 ppm   STEL: 3630 mg/m³   STEL: 1187 mg/m³   STEL: 1000 ppm   STEL: 2420 mg/m³   O* TWA: 50 ppm   TWA: 150 ppm   STEL: 500 mg/m³   STEL: 150 ppm   TWA: 150 ppm   STEL: 500 mg/m³   STEL: 2 ppm   TWA: 1.4 mg/m³   STEL: 2 ppm   STEL: 2 ppm   Ceiling: 2 ppm   Ceiling: 3 mg/m³   STEL: 2 ppm   TWA: 200 ppm   TWA: 200 ppm   TWA: 260 mg/m³   TWA: 260 mg	Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*	TWA: 200 ppm TWA: 260 mg/m³ Ada*	O* TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>
STEL: 1500 ppm   STEL: 3630 mg/m³   STEL: 1187 mg/m³   STEL: 1000 ppm   STEL: 2420 mg/m³   O* TWA: 50 ppm   TWA: 150 mg/m³   STEL: 150 ppm   STEL: 150 ppm   TWA: 150 mg/m³   STEL: 150 ppm   STEL: 500 mg/m³   STEL: 3 mg/m³   STEL: 2 ppm   TWA: 1.4 mg/m³   STEL: 2 ppm   STEL: 2 ppm   STEL: 2 ppm   TWA: 1.4 mg/m³   STEL: 2 ppm   STEL: 2 ppm   STEL: 30 mg/m³   STEL: 2 ppm   STEL: 30 mg/m³   STEL: 30 mg/m³   STEL: 2 ppm   STEL: 30 mg/m³   STEL: 300 mg/m³   TWA: 260 mg/m³   STEL: 150 ppm   STEL: 1	Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*	TWA: 200 ppm TWA: 260 mg/m³ Ada*	O* TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>
Dimethyl sulfoxide 67-68-5	Methanol 67-56-1 Acetone	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk* TWA: 500 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> TWA: 500 ppm
Dimethyl sulfoxide   67-68-5	Methanol 67-56-1 Acetone	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk* TWA: 500 ppm TWA: 1210 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> TWA: 500 ppm TWA: 1210 mg/m <sup>3</sup>
TWA: 50 ppm   TWA: 150 mg/m³   STEL: 150 ppm   STEL: 500 mg/m³   STEL: 300 mg/m³   STEL: 3 mg/m³   STEL: 2 ppm   TWA: 1.4 mg/m³   Ceiling: 2 ppm   Ceiling: 3 mg/m³   Ceiling: 3 mg/m³   Ceiling: 3 mg/m³   Ceiling: 3 mg/m³   STEL: 2 ppm   TWA: 100 ppm   TWA: 100 ppm   TWA: 130 mg/m³   STEL: 300 mg/m³   TWA: 200 ppm   TWA: 200 ppm   TWA: 133 mg/m³   STEL: 150 ppm   STEL: 1	Methanol 67-56-1 Acetone	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m³ TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm
Hydrogen peroxide	Methanol 67-56-1 Acetone 67-64-1	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³
Hydrogen peroxide	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O*
Hydrogen peroxide 7722-84-1 TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm  Chemical name Luxembourg Methanol 67-56-1  TWA: 200 ppm TWA: 260 mg/m³ TWA: 260 mg/m³ TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 1.4 mg/m³ TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Ceiling: 3 mg/m³ TWA: 100 ppm TWA: 100 ppm TWA: 133 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³ H*  STEL: 500 mg/m³ TWA: 1.4 mg/m³ Ceiling: 3 mg/m³ TWA: 100 ppm TWA: 100 ppm TWA: 130 mg/m³ STEL: 162.5 mg/m³ Frohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm
Hydrogen peroxide 7722-84-1  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 2 ppm  Chemical name  Luxembourg  Methanol 67-56-1  TWA: 200 ppm TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 1 ppm TWA: 1.4 mg/m³  Ceiling: 2 ppm Ceiling: 3 mg/m³  TWA: 100 ppm TWA: 133 mg/m³ STEL: 150 ppm STEL: 150 ppm STEL: 162.5 mg/m³ H*  TWA: 100 mg/m³ STEL: 162.5 mg/m³ Frohibited - substances or mixtures containing Methanol in weight concentration >3%; except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³
TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm  Chemical name  Luxembourg  Methanol 67-56-1  Peau* TWA: 200 ppm TWA: 200 mg/m³ TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³  TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 150 ppm STEL: 162.5 mg/m³ H*  TWA: 100 mg/m³ STEL: 162.5 mg/m³ H*  TWA: 100 mg/m³ Frohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm
STEL: 3 mg/m³ STEL: 2 ppm  Chemical name  Luxembourg  Methanol 67-56-1  Peau* TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 260 mg/m³  Methanol Arrow Ceiling: 2 ppm Ceiling: 3 mg/m³  TWA: 100 ppm TWA: 100 ppm TWA: 133 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³ Arrow STEL: 162.5 mg/m³ H*  Ceiling: 2 ppm Ceiling: 4 mg/m³ FWA: 100 ppm TWA: 100 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³ Arrow 100 mg/m³ Frohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk* TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm TWA: 1210 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 150 ppm STEL: 500 mg/m³
STEL: 2 ppm  Chemical name  Luxembourg  Methanol 67-56-1  TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 260 mg/m³  Peau* TWA: 200 ppm TWA: 260 mg/m³  TWA: 100 ppm TWA: 130 mg/m³  STEL: 150 ppm STEL: 162.5 mg/m³  H*  Reilling: 3 mg/m³  TWA: 100 ppm TWA: 100 ppm TWA: 100 mg/m³  STEL: 150 ppm STEL: 162.5 mg/m³  H*  Reilling: 3 mg/m³  TWA: 100 ppm TWA: 100 mg/m³  TWA: 100 mg/m³  Frohibited - substances or mixtures containing Methanol in weight concentration >3%; except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm TWA: 1210 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 500 mg/m³ TWA: 1 ppm
Chemical nameLuxembourgMaltaNetherlandsNorwayPolandMethanol 67-56-1Peau* TWA: 200 ppm TWA: 260 mg/m³skin* TWA: 200 ppm TWA: 260 mg/m³TWA: 100 ppm TWA: 133 mg/m³ H*TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³ H*TWA: 100 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³ H*	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³  -  TWA: 1 ppm TWA: 1.5 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm TWA: 1210 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 500 mg/m³ TWA: 1 ppm TWA: 1,4 mg/m³
Methanol Peau* Skin* TWA: 100 ppm TWA: 133 mg/m³ TWA: 130 mg/m³ TWA: 100 mg/m³ TWA: 260 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³ H* STEL: 162.5 mg/m³ Methanol in weight concentration >3%; except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³  -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm TWA: 1210 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 500 mg/m³ TWA: 1 ppm TWA: 1,4 mg/m³ Ceiling: 2 ppm
Methanol Peau* Skin* TWA: 100 ppm TWA: 133 mg/m³ TWA: 130 mg/m³ TWA: 100 mg/m³ TWA: 260 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³ H* STEL: 162.5 mg/m³ Methanol in weight concentration >3%; except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³  -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada* TWA: 500 ppm TWA: 1210 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 500 mg/m³ Celling: 2 ppm Ceiling: 3 mg/m³
TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 133 mg/m³  H*  TWA: 130 mg/m³  STEL: 150 ppm STEL: 162.5 mg/m³  H*  TWA: 100 mg/m³  Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 500 mg/m³ Celling: 2 ppm Ceiling: 3 mg/m³
TWA: 260 mg/m³  TWA: 260 mg/m³  H*  STEL: 150 ppm STEL: 162.5 mg/m³ H*  Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³ - TWA: 1 ppm TWA: 1.4 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 500 mg/m³ TWA: 1 ppm TWA: 1,4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland
STEL: 162.5 mg/m³ substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau*	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin*	Italy AIDII TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute* TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³ - TWA: 1 ppm TWA: 1.4 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³ O* TWA: 50 ppm TWA: 150 ppm STEL: 500 mg/m³ STEL: 500 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³
H* mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 ppm STEL: 500 mg/m³ STEL: 500 mg/m³ Ceiling: 2 ppm Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³ TWA: 100 mg/m³
Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm STEL: 500 mg/m³  TWA: 1 ppm TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited -
concentration >3%;except fuels used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 mg/m³ STEL: 150 ppm TWA: 1 ppm TWA: 1,4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited - substances or
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used in the model building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 ppm STEL: 150 ppm STEL: 500 mg/m³  TWA: 1 ppm TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited - substances or mixtures containing Methanol in weight
building, powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 ppm STEL: 150 ppm STEL: 500 mg/m³  TWA: 1 ppm TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited - substances or mixtures containing Methanol in weight concentration
powerboating, fuel	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 ppm STEL: 500 ppm STEL: 500 mg/m³  TWA: 1 ppm TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland  STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels
	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 ppm STEL: 500 mg/m³ STEL: 500 mg/m³ Ceiling: 2 ppm TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model
calle and hinfuale	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 150 ppm STEL: 500 ppm STEL: 500 mg/m³  TWA: 1 ppm TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland  STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building,
	Methanol 67-56-1  Acetone 67-64-1  Dimethyl sulfoxide 67-68-5  Hydrogen peroxide 7722-84-1  Chemical name Methanol	TWA: 200 ppm TWA: 260 mg/m³ STEL: 600 ppm STEL: 780 mg/m³ Sk*  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3630 mg/m³ -  TWA: 1 ppm TWA: 1.5 mg/m³ STEL: 3 mg/m³ STEL: 2 ppm Luxembourg Peau* TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m³ cute*  TWA: 500 ppm TWA: 1210 mg/m³  -  Malta skin* TWA: 200 ppm	Italy AIDII  TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ cute*  TWA: 250 ppm TWA: 594 mg/m³ STEL: 500 ppm STEL: 1187 mg/m³  -  TWA: 1 ppm TWA: 1.4 mg/m³  Netherlands TWA: 100 ppm TWA: 133 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ Ada*  TWA: 500 ppm TWA: 1210 mg/m³  -  Norway TWA: 100 ppm TWA: 130 mg/m³ STEL: 150 ppm STEL: 162.5 mg/m³	O* TWA: 200 ppm TWA: 260 mg/m³  TWA: 260 mg/m³  TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1000 ppm STEL: 2420 mg/m³  O* TWA: 50 ppm TWA: 50 ppm TWA: 150 ppm STEL: 500 mg/m³ STEL: 150 ppm STEL: 500 mg/m³ TWA: 1 ppm TWA: 1.4 mg/m³ Ceiling: 2 ppm Ceiling: 3 mg/m³ Poland STEL: 300 mg/m³ TWA: 100 mg/m³ Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel

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				T			skóra*
Acetone	TW	A: 500 ppm	TWA: 500 ppm	TWA: 500 ppm	TWA:	125 ppm	STEL: 1800 mg/m <sup>3</sup>
67-64-1		: 1210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>		95 mg/m <sup>3</sup>	TWA: 600 mg/m <sup>3</sup>
				STEL: 1 ppm		56.25 ppm	
						8.75 mg/m <sup>3</sup>	
Hydrogen peroxide		-	-	-		: 1 ppm	STEL: 0.8 mg/m <sup>3</sup>
7722-84-1					TWA: 1	I.4 mg/m <sup>3</sup>	TWA: 0.4 mg/m <sup>3</sup>
						.: 3 ppm	
					STEL: :	2.8 mg/m <sup>3</sup>	
Chemical name		Portugal	Romania	Slovakia		venia	Spain
Methanol		A: 200 ppm	TWA: 200 ppm	TWA: 200 ppm		200 ppm	TWA: 200 ppm
67-56-1		A: 260 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>		.60 mg/m <sup>3</sup>	TWA: 266 mg/m <sup>3</sup>
		L: 250 ppm	P*	K*		800 ppm	vía dérmica*
	(	Cutânea*			STEL: 1	040 mg/m <sup>3</sup>	
						K*	
Acetone		A: 500 ppm	TWA: 500 ppm	TWA: 500 ppm		500 ppm	TWA: 500 ppm
67-64-1		: 1210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>		210 mg/m <sup>3</sup>	TWA: 1210 mg/m <sup>3</sup>
	511	L: 750 ppm				420 mg/m <sup>3</sup>	
Dimothyl gulfavida						1000 ppm 60 mg/m <sup>3</sup>	
Dimethyl sulfoxide 67-68-5		-	-	-		50 ppm	-
07-00-3						100 ppm	
						320 mg/m <sup>3</sup>	
						K*	
[1,1-Biphenyl]-4,4-diamin		-	-	TWA: 8 mg/m <sup>3</sup>		-	-
e, 3,3,5,5-tetramethyl-				STEL: 40 mg/m <sup>3</sup>			
54827-17-7				-			
Hydrogen peroxide	T۱	VA: 1 ppm	-	TWA: 1 ppm		-	TWA: 1 ppm
7722-84-1				TWA: 1.4 mg/m <sup>3</sup>			TWA: 1.4 mg/m <sup>3</sup>
		_		Ceiling: 2.8 mg/m <sup>3</sup>			
Chemical name			weden	Switzerland			ted Kingdom
Methanol			200 ppm	TWA: 200 ppm			/A: 200 ppm
67-56-1			250 mg/m <sup>3</sup>	TWA: 260 mg/n			A: 266 mg/m <sup>3</sup>
			KGV: 250 ppm	STEL: 400 ppn STEL: 520 mg/r			EL: 250 ppm L: 333 mg/m <sup>3</sup>
		vagiedaride	KGV: 350 mg/m <sup>3</sup> H*	81 EL. 520 mg/r H*	II°	315	Sk*
Acetone		NGV/	250 ppm	 ТWA: 500 ppm	<u> </u>	T\/	/A: 500 ppm
67-64-1			600 mg/m <sup>3</sup>	TWA: 1200 mg/r			A: 1210 mg/m <sup>3</sup>
0,041			KGV: 500 ppm	STEL: 1000 ppi			EL: 1500 ppm
			KGV: 1200 mg/m <sup>3</sup>	STEL: 2400 mg/m <sup>3</sup>			L: 3620 mg/m <sup>3</sup>
Dimethyl sulfoxide			: 50 ppm	TWA: 50 ppm			<u>-</u>
67-68-5			150 mg/m <sup>3</sup>	TWA: 160 mg/n			
			KGV: 150 ppm	STEL: 100 ppn			
			KGV: 500 mg/m <sup>3</sup>	STEL: 320 mg/r			
			H*	H*			
Hydrogen peroxide			/: 1 ppm	TWA: 1 ppm			WA: 1 ppm
7722-84-1			1.4 mg/m <sup>3</sup>	TWA: 1.4 mg/m	13		A: 1.4 mg/m <sup>3</sup>
			KGV: 2 ppm	STEL: 2 ppm			TEL: 2 ppm
		Bindande	KGV: 3 mg/m <sup>3</sup>	STEL: 2.8 mg/n	า <sup>ช</sup>	STE	L: 2.8 mg/m <sup>3</sup>

# **Biological occupational exposure limits**

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Methanol	-	-	-	7.0 mg/g Creatinine -	0.47 mmol/L (urine -
67-56-1				urine (Methanol) - at	Methanol end of
				the end of the work	shift)
				shift	15 mg/L (urine -
					Methanol end of
					shift)
Acetone	-	-	80 mg/L - urine	20.0 mg/L - blood	-
67-64-1			(Acetone) - at the	(Acetone) - at the	
			end of exposure or	end of the work shift	

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			end of v	vork shift	20.0 mg/g Crea		
					- urine (Acetone		
					the end of the	work	
Chemical name	Donmark	Finland	Fro	ınce	shift Germany DF	-	Cormony TDCC
Methanol	Denmark	Finland		lethanol) -	15 mg/L (urin		Germany TRGS 15 mg/L (urine -
67-56-1	-	-		of shift	Methanol end		Methanol end of
07 00 1				) Jillit	shift)		shift)
					15 mg/L (urin	ne -	15 mg/L (urine -
					Methanol fo	or	Methanol for
					long-term		long-term
					exposures: at		exposures: at the
							end of the shift after
					several shift 15 mg/L - BAT		several shifts)
					of exposure or		
					of shift) urin		
Acetone	-	-		Acetone) -	50 mg/L (urin		50 mg/L (urine -
67-64-1			end o	of shift			Acetone end of shift)
					50 mg/L - BAT		
					of exposure or of shift) urin		
					2.5 mg/L - BAR		
					of exposure or		
					of shift) urin		
Chemical name	Hungary	Irelai			y MDLPS		Italy AIDII
Methanol	30 mg/L (urine - Methai				-		15 mg/L - urine
67-56-1	end of shift)	end of	shift)			(Met	thanol) - end of shift
	940 µmol/L (urine - Methanol end of shift	<b>\</b>					
Acetone	-	50 mg/L (urine	e - Acetone		_	25 m	g/L - urine (Acetone)
67-64-1		end of					- end of shift
Chemical name	Latvia	Luxemb	ourg		omania		Slovakia
Methanol	-	-					g/L (urine - Methanol
67-56-1				- er	nd of shift	end	of exposure or work
						30 m	shift) g/L (urine - Methanol
							ter all work shifts)
Acetone	-	-		50 mg/L -	urine (Acetone)		ng/L (urine - Acetone
67-64-1				- er	nd of shift	end	of exposure or work
	2					L .	shift)
Chemical name	Slovenia	Spai			vitzerland		United Kingdom
Methanol 67-56-1	15 mg/L - urine (Methanol) - at the end				urine - Methanol shift, and after	1	-
07-30-1	the work shift; for	end of s	orillt)		al shifts (for		
	long-term exposure: at t	he			m exposures))		
	end of the work shift af			936 µr	nol/L (urine -		
	several consecutive				end of shift, and	1	
	workdays				veral shifts (for		
Agetone	90.0 ma/l unica	50 mg/L /	Anatar =		m exposures))		
Acetone 67-64-1	80.0 mg/L - urine (Acetone) - at the end				urine - Acetone d of shift)		-
07-07-1	the work shift	o. Gild OI s	J. 1111./		mol/L (urine -		
					e end of shift)		
·	•	•		•		•	

Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC) No information available.

# 8.2. Exposure controls

# Personal protective equipment

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Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Wear suitable protective clothing. Long sleeved clothing. Skin and body protection

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

exceeded or irritation is experienced, ventilation and evacuation may be required.

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do General hygiene considerations

not eat, drink or smoke when using this product.

No information available. **Environmental exposure controls** 

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Physical state Liquid **Appearance** Liquid Colour white Odour Alcohol.

**Odour threshold** No information available

Values Remarks • Method Property None known

No data available Melting point / freezing point

Initial boiling point and boiling range 55.8-56.6

No data available None known **Flammability** Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

16 °C Flash point

No data available **Autoignition temperature** 

**Decomposition temperature** None known No data available None known pН

No data available No information available pH (as aqueous solution)

Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Water solubility Miscible in water

Solubility(ies) No data available None known Partition coefficient No data available None known Vapour pressure No data available None known No data available Relative density None known

No data available **Bulk density** 

**Liquid Density** 0.93909

No data available None known Relative vapour density

Particle characteristics

No information available **Particle Size** Particle Size Distribution No information available

### 9.2. Other information

#### 9.2.1. Information with regards to physical hazard classes

Not applicable

#### 9.2.2. Other safety characteristics

No information available

# **SECTION 10: Stability and reactivity**

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#### Substrate

10.1. Reactivity

**Reactivity** No information available.

10.2. Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.

10.5. Incompatible materials

**Incompatible materials**None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Information on likely routes of exposure

### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. Harmful by inhalation (based on components).

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye irritation

(based on components). May cause redness, itching, and pain.

**Skin contact** Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and irritation. May be absorbed through the skin in

harmful amounts. Harmful in contact with skin (based on components).

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful if swallowed (based on

components).

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Acute toxicity

### **Numerical measures of toxicity**

No information available

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)** 665.70 mg/kg **ATEmix (dermal)** 1,997.00 mg/kg

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ATEmix (inhalation-dust/mist) 3.34 mg/l ATEmix (inhalation-vapour) 241.80 mg/l

#### Unknown acute toxicity

3 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol	= 6200 mg/kg (Rat)	= 15840 mg/kg ( Rabbit )	= 22500 ppm (Rat) 8 h
Acetone	= 5800 mg/kg (Rat)	> 15700 mg/kg ( Rabbit )	= 50100 mg/m <sup>3</sup> ( Rat ) 8 h
Dimethyl sulfoxide	= 28300 mg/kg (Rat)	= 40000 mg/kg (Rat)	> 5.33 mg/L (Rat) 4 h
Hydrogen peroxide	= 1518 mg/kg (Rat)	= 9200 mg/kg ( Rabbit )	= 2000 mg/m³ ( Rat ) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

Based on the classification criteria of the Globally Harmonized System as adopted in the STOT - single exposure

country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

STOT - repeated exposure No information available.

No information available. **Aspiration hazard** 

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

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# 12.1. Toxicity

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methanol	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)		-
Acetone	-	LC50: 4.74 - 6.33mL/L (96h, Oncorhynchus mykiss) LC50: 6210 - 8120mg/L (96h, Pimephales promelas) LC50: =8300mg/L (96h, Lepomis macrochirus)	-	EC50: 10294 - 17704mg/L (48h, Daphnia magna) EC50: 12600 - 12700mg/L (48h, Daphnia magna)
Dimethyl sulfoxide	-	LC50: =34000mg/L (96h, Pimephales promelas) LC50: 33 - 37g/L (96h, Oncorhynchus mykiss) LC50: >40g/L (96h, Lepomis macrochirus) LC50: =41.7g/L (96h, Cyprinus carpio)	-	-
Hydrogen peroxide	-	LC50: =16.4mg/L (96h, Pimephales promelas) LC50: 18 - 56mg/L (96h, Lepomis macrochirus) LC50: 10.0 - 32.0mg/L (96h, Oncorhynchus mykiss)	-	EC50: 18 - 32mg/L (48h, Daphnia magna)

# 12.2. Persistence and degradability

Persistence and degradability No information available.

# 12.3. Bioaccumulative potential

### Bioaccumulation

**Component Information** 

Chemical name	Partition coefficient
Methanol	-0.77
Acetone	-0.24
Dimethyl sulfoxide	-1.35

# 12.4. Mobility in soil

Mobility in soil No information available.

### 12.5. Results of PBT and vPvB assessment

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#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Methanol	The substance is not PBT / vPvB
Acetone	The substance is not PBT / vPvB
Dimethyl sulfoxide	The substance is not PBT / vPvB
Hydrogen peroxide	The substance is not PBT / vPvB

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# **SECTION 14: Transport information**

IATA

**14.1 UN number or ID number** UN1987

**14.2 UN proper shipping name** Alcohols, n.o.s. (Methanol Solution, Acetone)

14.3 Transport hazard class(es) 3 14.4 Packing group

**Description** UN1987, Alcohols, n.o.s. (Methanol Solution, Acetone), 3, II

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

Special Provisions A3, A180

IMDG

**14.1 UN number or ID number** UN1987

**14.2 UN proper shipping name** ALCOHOLS, N.O.S. (Methanol Solution, Acetone)

**14.3** Transport hazard class(es) 3 **14.4** Packing group

**Description** UN1987, ALCOHOLS, N.O.S. (Methanol Solution, Acetone), 3, II, (16°C C.C.)

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

**Special Provisions** 274 **EmS-No** F-E, S-D

**14.7 Maritime transport in bulk** No information available

according to IMO instruments

<u>RID</u>

**14.1 UN number** UN1987

**14.2 UN proper shipping name** ALCOHOLS, N.O.S. (Methanol Solution, Acetone)

14.3 Transport hazard class(es) 3 14.4 Packing group ||

**Description** UN1987, ALCOHOLS, N.O.S. (Methanol Solution, Acetone), 3, II

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

Special Provisions 274, 601, 640C

Classification code F1

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Substrate Revision date 13-Nov-2023

\_\_\_\_\_

ADR

14.1 UN number or ID number 1987

**14.2 UN proper shipping name** ALCOHOLS, N.O.S. (Methanol Solution, Acetone)

14.3 Transport hazard class(es) 3
14.4 Packing group

**Description** 1987, ALCOHOLS, N.O.S. (Methanol Solution, Acetone), 3, II

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

Special Provisions 274, 601, 640C

Classification code F1
Tunnel restriction code (D/E)

# **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### National regulations

#### France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Methanol	RG 84	-
67-56-1		
Acetone	RG 84	-
67-64-1		
Dimethyl sulfoxide	RG 84	-
67-68-5		

#### Germany

Water hazard class (WGK) obviously hazardous to water (WGK 2)

#### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

	(	
Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Methanol - 67-56-1	Use restricted. See entry 69.	-
	Use restricted. See entry 75.	
Acetone - 67-64-1	Use restricted. See entry 75.	-
Dimethyl sulfoxide - 67-6	Use restricted. See entry 75.	-
Hydrogen peroxide - 7722	2-84-1 Use restricted. See entry 75.	-

### **Persistent Organic Pollutants**

Not applicable

### Dangerous substance category per Seveso Directive (2012/18/EU)

H3 - STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Methanol - 67-56-1	500	5000

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

### EU - Plant Protection Products (1107/2009/EC)

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Chemical name	EU - Plant Protection Products (1107/2009/EC)
Hydrogen peroxide - 7722-84-1	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Hydrogen peroxide - 7722-84-1	Product-type 2: Disinfectants and algaecides not intended
	for direct application to humans or animals Product-type 3:
	Veterinary hygiene Product-type 4: Food and feed area
	Product-type 5: Drinking water Product-type 6:
	Preservatives for products during storage Product-type 11:
	Preservatives for liquid-cooling and processing systems
	Product-type 12: Slimicides Product-type 1: Human
	hygiene

<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

# **SECTION 16: Other information**

#### Key or legend to abbreviations and acronyms used in the safety data sheet

### Full text of H-Statements referred to under section 3

EUH066 - Repeated exposure may cause skin dryness or cracking

H225 - Highly flammable liquid and vapour

H271 - May cause fire or explosion; strong oxidiser

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H370 - Causes damage to organs

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

# Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Classification procedure					
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used				
Acute oral toxicity	Calculation method				
Acute dermal toxicity	Calculation method				
Acute inhalation toxicity - gas	Calculation method				
Acute inhalation toxicity - vapour	Calculation method				
Acute inhalation toxicity - dust/mist	Calculation method				
Skin corrosion/irritation	Calculation method				
Serious eye damage/eye irritation	Calculation method				
Respiratory sensitisation	Calculation method				

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#### Substrate

Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision Note** Reformatted and updated existing information.

Revision date 13-Nov-2023

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Mar-2024 Revision Number 1.3

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name Stop Solution

Catalogue Number(s) 220SM

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In-vitro laboratory reagent or component

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer

Bio-Rad Laboratories, Diagnostic Group 4000 Alfred Nobel Drive

Hercules, California 94547

USA

**Legal Entity / Contact Address** 

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

**Technical Service** 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Corrosive to metals Category 1

#### 2.2. Label elements



Signal word Warning

### **Hazard statements**

H290 - May be corrosive to metals

# Precautionary Statements - EU (§28, 1272/2008)

P234 - Keep only in original packaging

P390 - Absorb spillage to prevent material damage

### 2.3. Other hazards

# **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

Not applicable

# 3.2 Mixtures

Chemical name	Weight-%	REACH registration number	,	Classification according to Regulation (EC) No.	concentration	M-Factor	M-Factor (long-term)
Sulfuric acid 7664-93-9	1 - 2.5	Not available	231-639-5 (016-020-00 -8)	, ,	limit (SCL)  Eye Irrit. 2 ::  5%<=C<15%  Skin Corr. 1A ::  C>=15%  Skin Irrit. 2 ::  5%<=C<15%	-	-
Hydrochloric acid 7647-01-0	1 - 2.5	Not available	231-595-7 (017-002-00 -2)	, ,	Eye Irrit. 2 :: 1%<=C<3% Skin Corr. 1B :: C>=5% Skin Irrit. 2 :: 1%<=C<5% STOT SE 3 :: C>=10%	-	-

### Full text of H- and EUH-phrases: see section 16

### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from

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CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Sulfuric acid 7664-93-9	2140	No data available	0.375	No data available	No data available
Hydrochloric acid 7647-01-0	238	5010	No data available	No data available	563.3022

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Eye contact**Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Call a doctor.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**Treat symptomatically.

# **SECTION 5: Firefighting measures**

5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

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Stop Solution Revision date 29-Mar-2024

### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required.

**Other information** Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Do not breathe

dust/fume/gas/mist/vapours/spray.

**General hygiene considerations** Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials. Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **Exposure Limits**

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Sulfuric acid	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9		STEL 0.2 mg/m <sup>3</sup>			_

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				<del> </del>			
Hydrochloric acid	T۷	VA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	STEL	: 10 ppm	TWA: 5 ppm
7647-01-0	TW	/A: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	STEL: 1	15.0 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
		EL: 10 ppm	STEL 10 ppm	STEL: 10 ppm		: 5 ppm	STEL: 10 ppm
		L: 15 mg/m <sup>3</sup>	STEL 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	TWA: 8	3.0 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
Chemical name	<u> </u>	Cyprus	Czech Republic	Denmark		stonia	Finland
Sulfuric acid	TWA	: 0.05 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>		0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9		0.00 mg/m	TWA: 0.05 mg/m <sup>3</sup>	STEL: 0.1 mg/m <sup>3</sup>	11171.0		STEL: 0.1 mg/m <sup>3</sup>
7001000			Ceiling: 2 mg/m <sup>3</sup>	thoracic fraction			0122. 0.1 mg/m
Hydrochloric acid	ST	EL: 10 ppm	TWA: 8 mg/m <sup>3</sup>	STEL: 5 ppm	Τ\Λ/Δ	: 5 ppm	STEL: 5 ppm
7647-01-0		L: 15 mg/m <sup>3</sup>	Ceiling: 15 mg/m <sup>3</sup>	STEL: 8 mg/m <sup>3</sup>		8 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>
7017 01 0		VA: 5 ppm	Coming. To mg/m	OTEL: OTING/III		: 10 ppm	01LL: 7.0 mg/m
		/A: 8 mg/m <sup>3</sup>				15 mg/m <sup>3</sup>	
Chemical name	1 0 0	France	Germany TRGS	Germany DFG		reece	Hungary
Sulfuric acid	Τ\Λ/Λ	: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>		0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
		EL: 3 mg/m <sup>3</sup>	I IVVA. U. I IIIg/III°	Peak: 0.1 mg/m <sup>3</sup>	I IVVA. U	1.05 mg/m²	T VVA. 0.05 mg/m²
7664-93-9 Hydrochloric acid		EL: 5 ppm	TM/A: 2 nnm	TWA: 2 ppm	T\\\ / \	.: 5 ppm	TWA: 8 mg/m <sup>3</sup>
7647-01-0			TWA: 2 ppm TWA: 3 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 3.0 mg/m <sup>3</sup>		1: 5 ppm 7 mg/m <sup>3</sup>	
7647-01-0	SIE	L: 7.6 mg/m <sup>3</sup>	I WA. 3 mg/m²				TWA: 5 ppm
				Peak: 4 ppm		_: 5 ppm	STEL: 165 mg/m <sup>3</sup>
			II I MDI DO	Peak: 6 mg/m <sup>3</sup>	STEL: 7 mg/m <sup>3</sup>		STEL: 10 ppm
Chemical name		Ireland	Italy MDLPS	Italy AIDII	Latvia		Lithuania
Sulfuric acid		A: 0.05 ppm	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>		TWA: 0.05 mg/m <sup>3</sup>
7664-93-9		L: 0.15 ppm					STEL: 3 mg/m <sup>3</sup>
Hydrochloric acid		/A: 8 mg/m <sup>3</sup>	TWA: 5 ppm	Ceiling: 2 ppm		: 5 ppm	TWA: 5 ppm
7647-01-0	T۷	VA: 5 ppm	TWA: 8 mg/m <sup>3</sup>	Ceiling: 2.9 mg/m <sup>3</sup>		8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
		EL: 10 ppm	STEL: 10 ppm			: 10 ppm	STEL: 10 ppm
		L: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>				STEL: 15 mg/m <sup>3</sup>
Chemical name		ıxembourg	Malta	Netherlands	Norway		Poland
Sulfuric acid	TWA	: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>			TWA: 0.05 mg/m <sup>3</sup>
7664-93-9						0.3 mg/m <sup>3</sup>	
Hydrochloric acid		EL: 10 ppm	STEL: 10 ppm	TWA: 5 ppm		g: 5 ppm	STEL: 10 mg/m <sup>3</sup>
7647-01-0		L: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	Ceiling	ı: 7 mg/m³	TWA: 5 mg/m <sup>3</sup>
	T۷	VA: 5 ppm	TWA: 5 ppm	STEL: 10 ppm			
	TW	'A: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>			
Chemical name		Portugal	Romania	Slovakia	Slo	ovenia	Spain
Sulfuric acid	TWA	A: 0.2 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0	0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9		Ŭ				0.05 mg/m <sup>3</sup>	
Hydrochloric acid	T۷	VA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm		: 5 ppm	TWA: 5 ppm
7647-01-0		/A: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8.0 mg/m <sup>3</sup>		8 mg/m <sup>3</sup>	TWA: 7.6 mg/m <sup>3</sup>
		EL: 10 ppm	STEL: 10 ppm	Ceiling: 15 mg/m <sup>3</sup>		: 10 ppm	STEL: 10 ppm
		L: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	3 .5 3		15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
		iling: 2 ppm				J	
Chemical name			Sweden Switzerland United Ki		ted Kingdom		
Sulfuric acid		NGV:	0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>		TWA	A: 0.05 mg/m <sup>3</sup>
7664-93-9			KGV: 0.2 mg/m <sup>3</sup>	STEL: 0.2 mg/m <sup>3</sup>		STE	L: 0.15 mg/m <sup>3</sup>
Hydrochloric acid			/: 2 ppm	TWA: 2 ppm			WA: 1 ppm
7647-01-0			: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	}		VA: 2 mg/m <sup>3</sup>
			KGV: 4 ppm	STEL: 4 ppm			TEL: 5 ppm
			KGV: 6 mg/m <sup>3</sup>	STEL: 6 mg/m	3		EL: 8 mg/m <sup>3</sup>
	I bindande			<del></del>		J STEL. OTHY/III	

# **Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

### Personal protective equipment

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Eye/face protection No special protective equipment required.

No special protective equipment required. Skin and body protection

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

exceeded or irritation is experienced, ventilation and evacuation may be required.

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this General hygiene considerations

product. Regular cleaning of equipment, work area and clothing is recommended.

No information available. **Environmental exposure controls** 

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Physical state Liquid clear liquid **Appearance** colourless Colour Odourless. Odour

**Odour threshold** No information available

**Property** Values Remarks • Method

Melting point / freezing point 0 °C

Initial boiling point and boiling range100 °C

Flammability No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point No data available None known **Autoignition temperature** No data available None known None known

**Decomposition temperature** 

No data available

No data available pH (as aqueous solution) No information available

Kinematic viscosity No data available None known None known **Dynamic viscosity** No data available

Water solubility Miscible in water

Solubility(ies) No data available None known Partition coefficient No data available None known Vapour pressure No data available None known Relative density No data available None known

**Bulk density** No data available **Liquid Density** No data available

Relative vapour density No data available None known

**Particle characteristics** 

**Particle Size** No information available No information available **Particle Size Distribution** 

#### 9.2. Other information

### 9.2.1. Information with regards to physical hazard classes

Not applicable

### 9.2.2. Other safety characteristics

No information available

# **SECTION 10: Stability and reactivity**

EGHS / BE Page 75 / 81 10.1. Reactivity

**Reactivity** No information available.

10.2. Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions 
None under normal processing.

10.4. Conditions to avoid

**Conditions to avoid** Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible materials Oxidising agent.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

**Product Information** 

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

Acute toxicity

**Numerical measures of toxicity** 

No information available

### The following values are calculated based on chapter 3.1 of the GHS document Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid	= 2140 mg/kg (Rat)	-	= 0.375 mg/L (Rat) 4 h
Hydrochloric acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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**Skin corrosion/irritation**No information available.

Serious eye damage/eye irritation No information available.

**Respiratory or skin sensitisation** No information available.

Germ cell mutagenicity No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity**No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available.

**Aspiration hazard** No information available.

### 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

#### 11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

### 12.1. Toxicity

**Ecotoxicity**The environmental impact of this product has not been fully investigated.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sulfuric acid	-	LC50: >500mg/L (96h, Brachydanio rerio)	-	-

### 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

### 12.4. Mobility in soil

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Mobility in soil No information available.

### 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment	
Sulfuric acid	The substance is not PBT / vPvB	
Hydrochloric acid	The substance is not PBT / vPvB	

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

# **SECTION 14: Transport information**

IATA

14.1 UN number or ID number

14.2 UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Hydrochloric acid)

14.3 Transport hazard class(es)

14.4 Packing group

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Hydrochloric acid), 8, III Description Not applicable

14.5 Environmental hazards

14.6 Special Precautions for Users

**Special Provisions** A3, A803

**IMDG** 

14.1 UN number or ID number UN3264

14.2 UN proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric acid)

14.3 Transport hazard class(es)

14.4 Packing group Ш

Description UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric

acid), 8, III Not applicable

14.5 Environmental hazards

14.6 Special Precautions for Users

**Special Provisions** 

223, 274 **EmS-No** F-A, S-B

14.7 Maritime transport in bulk

according to IMO instruments

No information available

RID

14.1 UN number UN3264

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric acid) 14.2 UN proper shipping name

14.3 Transport hazard class(es)

14.4 Packing group

Description UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric

acid), 8, III

Ш

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**14.5 Environmental hazards** Not applicable

14.6 Special Precautions for Users

Special Provisions 274 Classification code C1

ADR

14.1 UN number or ID number 3264

14.2 UN proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric acid)

14.3 Transport hazard class(es) 8
14.4 Packing group | ||

Description 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Hydrochloric

acid), 8, III

14.5 Environmental hazards

Not applicable

14.6 Special Precautions for Users

Special Provisions 274
Classification code C1
Tunnel restriction code (E)

# **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

#### **Netherlands**

Chemical name	Netherlands - List of	Netherlands - List of	Netherlands - List of
	Carcinogens	Mutagens	Reproductive Toxins
Sulfuric acid	Present	1	-

### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

product contains one of more cubotance(e) cubject to rectiletion (regulation (20) rec. rectification); rumox		
Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Sulfuric acid - 7664-93-9	Use restricted. See entry 75.	-
Hydrochloric acid - 7647-01-0	Use restricted. See entry 75.	-

#### **Persistent Organic Pollutants**

Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)

itainea aangereae easetaneee per eereee since	a daligorous substantos per estrese birostito (1511/16/16)				
Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)			
Hydrochloric acid - 7647-01-0	25	250			

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

**Biocidal Products Regulation (EU) No 528/2012 (BPR)** 

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Hydrochloric acid - 7647-01-0	Product-type 2: Disinfectants and algaecides not intended

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for direct application to humans or animals

<u>International Inventories</u>

Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

# **SECTION 16: Other information**

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method
Corrosive to metals	On basis of test data

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

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Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision Note** Reformatted and updated existing information.

Revision date 29-Mar-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

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**End of Safety Data Sheet** 

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