

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 17-Aug-2022 Revision Number 1.2

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

1.1. Product identifier

Product Name Acrylamide/Bis 37.5:1 Premixed Powder

Catalogue Number(s) 1610122, 1610125

Pure substance/mixture Mixture

Contains Acrylamide, Methylene diacrylamide

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

USA

Recommended use Laboratory chemicals

No information available Uses advised against

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters Manufacturer

Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA

Legal Entity / Contact Address Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

For further information, please contact

00800 00246 723 **Technical Service**

> 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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Category 3 - (H301) Acute toxicity - Oral

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Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)
Germ cell mutagenicity	Category 1B - (H340)
Carcinogenicity	Category 1B - (H350)
Reproductive toxicity	Category 1B - (H360)
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains Acrylamide, Methylene diacrylamide



Signal word Danger

Hazard statements

- H301 Toxic if swallowed
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H340 May cause genetic defects
- H350 May cause cancer
- H360 May damage fertility or the unborn child
- H370 Causes damage to organs
- H372 Causes damage to organs through prolonged or repeated exposure
- H412 Harmful to aquatic life with long lasting effects

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

- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor
- P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor
- P273 Avoid release to the environment
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water

2.3. Other hazards

Harmful to aquatic life.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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Chemical name	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Acrylamide 79-06-1	50 - 100	No data available	201-173-7	Acute Tox. 3 (H301) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Muta. 1B (H340) Carc. 1B (H350) Repr. 2 (H361f) STOT RE 1 (H372) Aquatic Chronic 3 (H412)	-	•	
Methylene diacrylamide 110-26-9	2.5 - 5	No data available	203-750-9	Acute Tox. 3 (H301) Acute Tox. 4 (H312) Muta. 1B (H340) Carc. 1B (H350) Repr. 1B (H360) STOT SE 1 (H370)	Muta. 1B :: C>=0.1% Carc. 1B :: C>=0.1% Repr. 1B :: C>=0.1% STOT SE 1 :: C>=1.0%	-	-

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 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Acrylamide 79-06-1	124	1148	No data available	No data available	No data available
Methylene diacrylamide 110-26-9	390	No data available	No data available	No data available	No data available

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
Acrylamide	79-06-1	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get

medical advice/attention.

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

attention immediately if symptoms occur. If breathing has stopped, give artificial respiration.

Get medical attention immediately. If symptoms persist, call a physician.

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

symptoms persist, call a physician. 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 May cause an allergic skin reaction. If symptoms persist, call a physician. Wash off

immediately with soap and plenty of water for at least 15 minutes.

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 dust/fume/gas/mist/vapors/spray. Use personal protective

equipment as required. See section 8 for more information.

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

Symptoms Itching. Rashes. Hives. 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 physicians May cause sensitization 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

chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

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. Avoid generation of dust. Do not breathe dust.

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.

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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 before reuse. Remove contaminated clothing and shoes. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust.

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. Wash hands before breaks and immediately after handling the product. Avoid breathing dust/fume/gas/mist/vapors/spray.

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
Acrylamide	TWA: 0.1 mg/m ³	H*	TWA: 0.03 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³
79-06-1	*	Skin sensitizer	*	K*	*
					Skin Sensitisation
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Acrylamide	*	TWA: 0.1 mg/m ³	TWA: 0.03 mg/m ³	TWA: 0.03 mg/m ³	TWA: 0.03 mg/m ³
79-06-1	TWA: 0.1 mg/m ³	*	H*	STEL: 0.1 mg/m ³	TWA: 0.1 mg/m ³
		Sensitizer		Α*	iho*
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Acrylamide	TWA: 0.1 mg/m ³	Skin notation	*	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³
79-06-1	*		skin sensitizer	skin - potential for	*
				cutaneous	
				absorption	
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Acrylamide	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.03 mg/m ³	TWA: 0.1 mg/m ³	*
79-06-1	STEL: 0.3 mg/m ³	pelle*	*	*	TWA: 0.03 mg/m ³
	Sk*				STEL: 0.1 mg/m ³
	Sensitizer				
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Acrylamide	-	-	TWA: 0.1 mg/m ³	TWA: 0.03 mg/m ³	TWA: 0.07 mg/m ³
79-06-1			H*	STEL: 0.09 mg/m ³	*
				H*	
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain

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Acrylamide 79-06-1	TWA	\: 0.1 mg/m ³ P*	TWA: 0.03 mg/m ³	TWA: 0.03 mg/m³ STEL: 0.15 mg/m³ *	TWA: (0.1 mg/m ³ *	TWA: 0.03 mg/m ³ vía dérmica* sensitizer
Chemical name		Sı	weden	Switzerland		Uni	ted Kingdom
Acrylamide		NGV: (0.03 mg/m ³	TWA: 0.03 mg/n	Ո ³	TW	A: 0.1 mg/m ³
79-06-1 Bindande k		(GV: 0.1 mg/m ³	H*		STE	EL: 0.3 mg/m ³	
			*				Sk*

Biological occupational exposure limits

Chemical name	Hungary	Ireland	Italy	Italy REL
Acrylamide	-	0.5 nmol/g hemoglobin -	-	-
79-06-1		blood		
		(N-2-Carbamoylethyl-vali		
		ne adduct) - post shift		
		working week		
Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Acrylamide	800 pmol/g Globin -	-	-	-
79-06-1	erythrocyte fraction of the			
	whole blood			
	whole blood (N-(2-Carbonamidethyl)v			
	whole blood			

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

No information available. 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. Impervious gloves.

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

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

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. Wash hands before breaks and

immediately after handling the product. Avoid breathing dust/fume/gas/mist/vapors/spray.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateSolidAppearancesolidColourwhiteOdourSulphurous.

Odour threshold No information available

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Property
Melting point / freezing point
Boiling point / boiling range
Flammability (solid, gas)
Flammability Limit in Air

None known
None known

Upper flammability or explosive No data available limits

Lower flammability or explosive

limits
Flash point
No data available

Autoignition temperature No data available

Decomposition temperature

None known
None known

No data available

pH (as aqueous solution)

No data available

No information available

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone knownWater solubilitySoluble in water

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

Bulk density

Liquid Density

No data available

No data available

No data available

 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 regard to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

None known

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 Strong acids. Strong bases. Strong oxidizing agents.

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. 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 May cause sensitization 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). Causes skin irritation.

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

gastrointestinal irritation, nausea, vomiting and diarrhea. Toxic if swallowed. (based on

components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Coughing

and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral) 123.20 mg/kg ATEmix (dermal) 1,101.00 mg/kg ATEmix (inhalation-dust/mist) 1.54 mg/l

Unknown acute toxicity

2.6 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acrylamide	= 124 mg/kg (Rat)	= 1148 mg/kg (Rabbit)	-
Methylene diacrylamide	= 390 mg/kg (Rat)	-	-

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

Skin corrosion/irritation Classification based on data available for ingredients.

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

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Contains a known or suspected mutagen. Classification based on data available for

ingredients. May cause genetic defects.

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The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
Acrylamide	Muta. 1B

Carcinogenicity

Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union	
Acrylamide	Carc. 1B	

Reproductive toxicity

Contains a known or suspected reproductive toxin. Classification based on data available

for ingredients. May damage fertility or the unborn child.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Acrylamide	Repr. 2

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

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 Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicityContains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acrylamide	-	LC50: 103 - 115mg/L (96h, Pimephales promelas) LC50: 137 - 191mg/L (96h, Oncorhynchus mykiss) LC50: 74 - 150mg/L (96h, Oncorhynchus mykiss) LC50: 81 - 150mg/L (96h, Lepomis macrochirus) LC50: =124mg/L (96h,		EC50: =98mg/L (48h, Daphnia magna)

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	Pimephales promelas)	

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Acrylamide	-0.9
Methylene diacrylamide	-0.08

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	
Acrylamide	The substance is not PBT / vPvB PBT assessment does	
	not apply	
Methylene diacrylamide	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

<u>IATA</u>

14.1 UN number or ID number UN2074

14.2 UN proper shipping name Acrylamide, solid

14.3 Transport hazard class(es)14.4 Packing group6.1

Description UN2074, Acrylamide, solid, 6.1, III

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

Special Provisions None

IMDG

14.1 UN number or ID number UN2074

14.2 UN proper shipping name ACRYLAMIDE, SOLID

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14.3 Transport hazard class(es) 6.1 **14.4 Packing group**

Description UN2074, ACRYLAMIDE, SOLID, 6.1, III

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

Special Provisions None EmS-No F-A, S-A

14.7 Maritime transport in bulk No information available

according to IMO instruments

RID

14.1 UN number UN2074

14.2 UN proper shipping name ACRYLAMIDE, SOLID

14.3 Transport hazard class(es) 6.1 **14.4 Packing group** III

Description UN2074, ACRYLAMIDE, SOLID, 6.1, III

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

Special Provisions None Classification code T2

ADR

14.1 UN number or ID number 2074

14.2 UN proper shipping name ACRYLAMIDE, SOLID

14.3 Transport hazard class(es) 6.1 **14.4 Packing group** III

Description 2074, ACRYLAMIDE, SOLID, 6.1, III

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

Special Provisions None Classification code T2 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) strongly hazardous to water (WGK 3)

Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Acrylamide	Present	Present	Fertility (Category 1B)

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.

Authorizations 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		Substance subject to authorization per
	Annex XVII	REACH Annex XIV
Acrylamide - 79-06-1	28.	-
	29.	
	60.	

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75	
75.	1

Persistent Organic Pollutants

Not applicable

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

H3 - STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

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

Full text of H-Statements referred to under section 3

H301 - Toxic if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H340 - May cause genetic defects

H350 - May cause cancer

H360 - May damage fertility or the unborn child

H361f - Suspected of damaging fertility

H370 - Causes damage to organs

H372 - Causes damage to organs through prolonged or repeated exposure

H412 - Harmful 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

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Carcinogenicity	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)

Australia 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)

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

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

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

World Health Organization

Revision Note Reformatted and updated existing information

Revision date 17-Aug-2022

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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