# **KIT SAFETY DATA SHEET**



Kit Product Name AUTOPHAGY ASSAY, RED DETECTION KIT

Kit Catalogue Number(s) Not applicable

Revision date 11-Mar-2022

# Kit Contents

Catalogue Number(s)	Product Name
	FIXATIVE - #10498
	AUTOPHAGY PROBE, RED - #20402

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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 17-Nov-2021 Previous 16-Nov-2020 Revision Number 1

revision date

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

1.1. Product identifier

Product Name FIXATIVE - #10498

Safety data sheet number 10498

Pure substance/mixture Mixture

Contains Formaldehyde, Methanol, Sodium chloride

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

**Recommended use** For research use only

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u> <u>Manufacturer</u> <u>Legal Entity / Contact Address</u>

Bio-Rad Laboratories Inc.

Bio-Rad Bio-Rad Laboratories Ltd

1000 Alfred Nobel Drive

Endeavour House

The Junction

Hercules, CA 94547 Langford Business Park Station Road
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For further information, please contact

**Technical Service** 00800 00246 723

Techsupport.UK@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC UK: 44-870-8200418

# **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 (Gases)	Category 4 - (H332)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 1 Sub-category B - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)
Germ cell mutagenicity	Category 2 - (H341)
Carcinogenicity	Category 1B - (H350)
Specific target organ toxicity (single exposure)	Category 1 Category 3 - (H370,H335)

#### 2.2. Label elements

Contains Formaldehyde, Methanol, Sodium chloride



#### Signal word Danger

#### **Hazard statements**

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H370 - Causes damage to organs

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

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

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

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

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

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

#### 2.3. Other hazards

Harmful to aquatic life.

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

### 3.1 Substances

Not applicable

#### 3.2 Mixtures

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)
Formaldehyde 50-00-0	10 - 20	No data available	200-001-8	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Muta. 2 (H341) Carc. 1B (H350) STOT SE 3 (H335)	Eye Irrit. 2 :: 1%<=C<3% Skin Corr. 1B :: C>=5% Skin Irrit. 2 :: 1%<=C<5% Skin Sens. 1 :: C>=0.1% STOT SE 3 :: C>=5%	-	-
Methanol 67-56-1	2.5 - 5	No data available	200-659-6	Acute Tox. 3 (H301) Acute Tox. 3 (H311)	STOT SE 1 :: C>=1%	-	-

		Acute Tox. 3 (H331)		
		STOT SE 1 (H370)		
		Flam. Liq. 2 (H225)		

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

#### **Acute Toxicity Estimate**

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
	mg/kg	mg/kg	hour - dust/mist - mg/L	hour - vapor - mg/L	hour - gas - ppm
Formaldehyde 50-00-0	100	2000	No data available	No data available	463
Methanol 67-56-1	6200	15840	No data available	41.6976	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. Immediate medical attention is

required. IF exposed or concerned: Get medical advice/attention.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

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

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Get immediate medical advice/attention.

**Skin contact**Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin

reaction.

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

person. Get immediate medical advice/attention. Clean mouth with water and drink

afterwards plenty of water.

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 direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid breathing vapors 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 Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in

breathing.

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

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause

sensitization in susceptible persons. 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.

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

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. 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

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

> protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

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

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

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

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

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

6.4. Reference to other sections

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

# **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. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. 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

vapors or mists.

#### **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. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the 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. Protect from moisture. 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
Formaldehyde	TWA: 0.37 mg/m <sup>3</sup>	TWA: 0.3 ppm	-	STEL: 2.0 mg/m <sup>3</sup>	TWA: 0.3 ppm
50-00-0	TWA: 0.3 ppm	TWA: 0.37 mg/m <sup>3</sup>		STEL: 0.74 mg/m <sup>3</sup>	TWA: 0.37 mg/m <sup>3</sup>
	*	STEL 0.6 ppm		STEL: 0.6 ppm	TWA: 0.5 ppm
		STEL 0.74 mg/m <sup>3</sup>		Skin Sensitisation	TWA: 0.62 mg/m <sup>3</sup>
		Skin sensitizer		TWA: 0.37 mg/m <sup>3</sup>	STEL: 0.6 ppm
				TWA: 0.3 ppm	STEL: 0.74 mg/m <sup>3</sup>
				TWA: 1.0 mg/m <sup>3</sup>	Skin Sensitisation
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*	*		
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Formaldehyde	-	TWA: 0.5 mg/m <sup>3</sup>	Ceiling: 0.28 ppm	TWA: 0.5 ppm	TWA: 0.3 ppm
50-00-0		Ceiling: 1 mg/m <sup>3</sup>	Ceiling: 0.437	TWA: 0.6 mg/m <sup>3</sup>	TWA: 0.37 mg/m <sup>3</sup>
		*	mg/m³	STEL: 1 ppm	STEL: 0.6 ppm
		Sensitizer		STEL: 1.2 mg/m <sup>3</sup>	STEL: 0.74 mg/m <sup>3</sup>
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>	*	H*	STEL: 250 ppm	STEL: 250 ppm
				STEL: 350 mg/m <sup>3</sup>	STEL: 330 mg/m <sup>3</sup>
				A*	iho*
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Formaldehyde	TWA: 0.5 ppm	TWA: 0.3 ppm	TWA: 0.3 ppm	TWA: 0.3 ppm	TWA: 0.6 mg/m <sup>3</sup>
50-00-0	STEL: 1 ppm	TWA: 0.37 mg/m <sup>3</sup>	TWA: 0.37 mg/m <sup>3</sup>	TWA: 0.37 mg/m <sup>3</sup>	STEL: 0.6 mg/m <sup>3</sup>
			Peak: 0.6 ppm	STEL: 0.6 ppm	*
			Peak: 0.74 mg/m <sup>3</sup>	STEL: 0.74 mg/m <sup>3</sup>	
			skin sensitizer	Skin sensitization	
Methanol	TWA: 200 ppm	TWA: 100 ppm	TWA: 100 ppm	TWA: 200 ppm	TWA: 260 mg/m <sup>3</sup>
67-56-1	TWA: 260 mg/m <sup>3</sup>	TWA: 130 mg/m <sup>3</sup>	TWA: 130 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>	*
	STEL: 1000 ppm	H*	Peak: 200 ppm	STEL: 250 ppm	
	STEL: 1300 mg/m <sup>3</sup>		Peak: 260 mg/m <sup>3</sup>	STEL: 325 mg/m <sup>3</sup>	
	*		*	skin - potential for	
				cutaneous	
				absorption	
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Formaldehyde	TWA: 0.3 ppm	TWA: 0.37 mg/m <sup>3</sup>	STEL: 0.3 ppm	TWA: 0.5 mg/m <sup>3</sup>	Sensitizer

50-00-0	TWA TWA STE STEL	A: 0.5 ppm : 0.37 mg/m³ : 0.62 mg/m³ EL: 0.6 ppm : 0.738 mg/m³ :: 0.62 mg/m³ Gensitizer	TWA: 0.3 ppm TWA: 0.62 mg/m³ TWA: 0.5 ppm STEL: 0.74 mg/m³ STEL: 0.6 mg/m³ pelle*	STEL: 0.37 mg/m <sup>3</sup>			TWA: 0.3 ppm TWA: 0.37 mg/m³ TWA: 0.62 mg/m³ TWA: 0.5 ppm STEL: 0.74 mg/m³ STEL: 0.6 ppm
Methanol 67-56-1	TWA STE	A: 200 ppm x: 260 mg/m <sup>3</sup> EL: 600 ppm L: 780 mg/m <sup>3</sup> Sk*	TWA: 200 ppm TWA: 260 mg/m³ pelle*	TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ *		200 ppm 260 mg/m <sup>3</sup>	* TWA: 200 ppm TWA: 260 mg/m³
Chemical name	Lu	xembourg	Malta	Netherlands	No	rway	Poland
Formaldehyde 50-00-0		-	-	TWA: 0.15 mg/m³ STEL: 0.5 mg/m³	TWA: 0 TWA: STEL: 0 STEL: Ceilin	.37 mg/m <sup>3</sup> 0.3 ppm 0.74 mg/m <sup>3</sup> 0.6 ppm g: 1 ppm 1.2 mg/m <sup>3</sup>	Skin Sensitisation STEL: 0.74 mg/m³ TWA: 0.37 mg/m³
Methanol 67-56-1		* A: 200 ppm a: 260 mg/m <sup>3</sup>	* TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 133 mg/m <sup>3</sup> H*	TWA: 1 STEL: STEL: 1	100 ppm 30 mg/m³ 150 ppm 62.5 mg/m³ H*	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 cells and biofuels *
Chemical name		Portugal	Romania	Slovakia	Slo	venia	Spain
Formaldehyde 50-00-0	TWA TWA TW STE STEL Ceili	A: 0.3 ppm : 0.37 mg/m³ : 0.62 mg/m³ 'A: 0.5 ppm EL: 0.6 ppm :: 0.74 mg/m³ ng: 0.3 ppm sitizer dermal	TWA: 1 ppm TWA: 1.2 mg/m³ STEL: 2 ppm STEL: 3 mg/m³	TWA: 0.3 ppm TWA: 0.37 mg/m³ Sensitizer Ceiling: 0.74 mg/m³	TWA: TWA: 0 TWA: STEL:	.62 mg/m <sup>3</sup> 0.5 ppm .37 mg/m <sup>3</sup> 0.3 ppm 0.6 ppm 0.74 mg/m <sup>3</sup>	TWA: 0.3 ppm TWA: 0.37 mg/m³ STEL: 0.6 ppm STEL: 0.74 mg/m³ sensitizer
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm P*		TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> *	TWA: 2 STEL:	200 ppm 260 mg/m <sup>3</sup> 800 ppm 040 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 266 mg/m³ vía dérmica*
Chemical name	Chemical name Sv		weden	Switzerland		Uni	ted Kingdom
50-00-0 NGV: (Bindande Bindande K		: 0.3 ppm ).37 mg/m³ KGV: 0.6 ppm GV: 0.74 mg/m³ *	TWA: 0.3 ppm TWA: 0.37 mg/n STEL: 0.6 ppm STEL: 0.74 mg/r	n/m³ TW		WA: 2 ppm A: 2.5 mg/m³ FEL: 2 ppm :L: 2.5 mg/m³	
Methanol NG 67-56-1 NG Vägledar		NGV: NGV: 2 Vägledande	200 ppm 250 mg/m³ 8 KGV: 250 ppm KGV: 350 mg/m³	TWA: 200 ppm TWA: 260 mg/n STEL: 400 ppm STEL: 520 mg/n H*	n <sup>3</sup> TW n ST		/A: 200 ppm A: 266 mg/m³ EL: 250 ppm L: 333 mg/m³ Sk*

# **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 (Methar at the end of work shift		Methanol end of shift) 15 mg/L (urine - Methanol end of shift)
Chemical name	Denmark		Finland	Fra	nce	Germany		Germany
Methanol 67-56-1	-		-	(Methano	urine l) - end of iift	15 mg/L - uri (Methanol) - er shift 15 mg/L - uri (Methanol) - long-term exposures: at end of the shift several shift	nd of ne for the after	15 mg/L (urine - Methanol end of shift) 15 mg/L (urine - Methanol for long-term exposures: at the end of the shift after several shifts)
Chemical name	Hungary		Ireland		Italy			Italy REL
Methanol	30 mg/L (urine -		15 mg/L - urine		-		15 mg/L - urine	
67-56-1	Methanol end of shi 940 µmol/L (urine Methanol end of shi	-	(Methanol) - end of s				(Me	ethanol) - end of shift
Chemical name	Latvia		Luxembourg		R	omania		Slovakia
Methanol 67-56-1	-		-			ırine (Methanol) nd of shift	exp	30 mg/L (urine - Methanol end of cosure or work shift) 30 mg/L (urine - ethanol after all work shifts)
Chemical name	Slovenia		Spair		Switzerland			United Kingdom
Methanol 67-56-1	15 mg/L - urine (Methanol) - at the en the work shift; for long-term exposure: the end of the work s after several consecu workdays	at shift	15 mg/L (u Methanol enc		Methand and after (for	g/L (urine - ol end of shift, r several shifts long-term posures))		-

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** Tight sealing safety goggles. Face protection shield.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

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

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

**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 Clear to semi-clear

**Colour** Varies

Odour No information available.

No information available

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

Melting point / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone 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
Decomposition temperature None known
None known

ecomposition temperature

None known

None known

pH (as aqueous solution)

No data available

No information available

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Water solubilitySoluble in waterSolubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Relative density

Bulk density

Liquid Density

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**

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. Excessive heat.

10.5. Incompatible materials

**Incompatible materials** Acids. Bases. Oxidizing 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. Corrosive by inhalation.

(based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by

inhalation.

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

damage. (based on components). Corrosive to the eyes and may cause severe damage

including blindness. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May be

absorbed through the skin in harmful amounts. Harmful in contact with skin.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes.

Hives.

Acute toxicity

**Numerical measures of toxicity** 

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

 ATEmix (oral)
 714.30 mg/kg

 ATEmix (dermal)
 1,985.29 mg/kg

 ATEmix (inhalation-gas)
 7,000.00 ppm

 ATEmix (inhalation-dust/mist)
 3.58 mg/l

 ATEmix (inhalation-vapor)
 1,042.40 mg/l

Unknown acute toxicity

4 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

Oral LD50No information availableDermal LD50No information availableInhalation LC50No information available

Inhalation LC50 Component Information No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	
Formaldehyde	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	< 463 ppm (Rat) 4 h	
Methanol	= 6200 mg/kg (Rat)	= 15840 mg/kg ( Rabbit )	= 22500 ppm (Rat) 8 h	

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. Causes burns.

Serious eye damage/eye irritation Classification based on data available for ingredients. Risk of serious damage to eyes.

Causes burns.

**Respiratory or skin sensitization** May cause sensitization by skin contact.

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

ingredients. Suspected of causing genetic defects.

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

Chemical name	European Union				
Formaldehyde	Muta. 2				

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		
Formaldehyde	Carc. 1B		

Reproductive toxicity No information available.

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.

Causes damage to organs if inhaled. May cause respiratory irritation.

**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** 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.

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
Es anno al da basado		1.050, 0.000, 0.000, 1/1	microorganisms	E050: 44.0 . 40::- :://
Formaldehyde	-	LC50: 0.032 - 0.226mL/L	-	EC50: 11.3 - 18mg/L
		(96h, Oncorhynchus		(48h, Daphnia magna)
		mykiss)		LC50: =2mg/L (48h,
		LC50: 100 - 136mg/L		Daphnia magna)
		(96h, Oncorhynchus		
		mykiss)		
		LC50: 22.6 - 25.7mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: 23.2 - 29.7mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: =1510µg/L (96h,		
		Lepomis macrochirus)		
		LC50: =41mg/L (96h,		
		Brachydanio rerio)		
Methanol	-	LC50: 13500 -	-	-
		17600mg/L (96h,		
		Lepomis macrochirus)		
		LC50: 18 - 20mL/L (96h,		
		Oncorhynchus mykiss)		
		LC50: 19500 -		
		20700mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: =28200mg/L (96h,		
		Pimephales promelas)		
		LC50: >100mg/L (96h,		
		Pimephales promelas)		

## 12.2. Persistence and degradability

**Persistence and degradability** No information available.

### 12.3. Bioaccumulative potential

#### **Bioaccumulation**

**Component Information** 

Component information				
Chemical name	Partition coefficient			
Formaldehyde	0.35			
Methanol	-0.77			

# 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
Formaldehyde	The substance is not PBT / vPvB PBT assessment does
	not apply
Methanol	The substance is not PBT / vPvB PBT assessment does
	not apply Further information relevant for the PBT
	assessment is necessary

#### 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

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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

14.1 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

14.1 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

### National regulations

#### **France**

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Formaldehyde 50-00-0	RG 43	-
Methanol 67-56-1	RG 84	-

#### Germany

Water hazard class (WGK) strongly hazardous to water (WGK 3)

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Formaldehyde	Present	-	-

#### **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	Restricted substance per REACH	Substance subject to authorization per
	Annex XVII	REACH Annex XIV
Formaldehyde - 50-00-0	72.	-
	28.	
	75.	
Methanol - 67-56-1	69.	-

### **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)
Formaldehyde - 50-00-0	5	50
Methanol - 67-56-1	500	5000

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

Not applicable

Chemical name	EU - Biocides	
Formaldehyde - 50-00-0	Product-type 22: Embalming and taxidermist fluids	

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

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

H225 - Highly flammable liquid and vapor

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

H331 - Toxic if inhaled

H335 - May cause respiratory irritation

H341 - Suspected of causing genetic defects

H350 - May cause cancer

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
Carcinogenicity	Calculation method
Reproductive toxicity	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 Significant changes throughout SDS. Review all sections

Revision date 17-Nov-2021

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** 



# 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

The Junction

Station Road

UK

Watford, WD17 1ET

Revision date 03-Aug-2021 Previous 08-Feb-2021 Revision Number 1.1

revision date

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

1.1. Product identifier

Product Name AUTOPHAGY PROBE, RED - #20402

Safety data sheet number 20402

Pure substance/mixture Substance

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

**Recommended use** For research use only

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturerLegal Entity / Contact AddressBio-Rad Laboratories Inc.Bio-RadBio-Rad Laboratories Ltd

Bio-Rad Laboratories Inc.

1000 Alfred Nobel Drive
Hercules, CA 94547

Bio-Rad
Endeavour House
Langford Business Park

USA Kidlington
Oxford
OX5.1GE

OX5 1GE United Kingdom

e-mail:

antibody\_safetydatasheets@bio-rad.com

For further information, please contact

**Technical Service** 00800 00246 723

Techsupport.UK@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC UK: 44-870-8200418

# **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

EGHS / BE Page 17/25

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

#### 3.1 Substances

Chemical name	e 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)
Trade secret	50 - 100	No data available	No information available	No data available	-	-	-

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

#### **Acute Toxicity Estimate**

No information 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 physician.

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

physician.

**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

### **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

No information available.

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** 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

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** This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

#### **Biological occupational exposure limits**

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

Revision date 03-Aug-2021

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

No information available. No information available.

(PNEC)

8.2. Exposure controls

Personal protective equipment

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.

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

No information available. **Environmental exposure controls** 

# SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid

**Appearance** Solid, (white to off-white) powder or cake, lyophilised

Colour Varies

Odour No information available. **Odour threshold** No information available

Remarks • Method **Property** Values

No data available Melting point / freezing point None known Boiling point / boiling range No data available None known Flammability (solid, gas) 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 No data available Autoignition temperature None known **Decomposition temperature** None known pН

None known

None known

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

Kinematic viscosity **Dynamic viscosity** No data available

Water solubility Insoluble in water

Solubility(ies) No data available None known No data available Partition coefficient 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

No data available Vapour density None known

Particle characteristics

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

#### 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**

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 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

Dermal LD50No information availableInhalation LC50No information availableInhalation LC50No information available

Revision date 03-Aug-2021

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 sensitization** 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** No information available.

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.

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.

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

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

14.5 Environmental hazards14.6 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

14.1 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

# **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) non-hazardous to water (nwg)

#### **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 does not contain substances subject to authorization (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

Revision date 03-Aug-2021

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

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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

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National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

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

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World Health Organization

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Revision date 03-Aug-2021

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**End of Safety Data Sheet**