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 04-Oct-2022 **Revision Number** 1.2

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

1.1. Product identifier

Product Name 2-D SDS-PAGE Standards

Catalogue Number(s) 1610320, 1610320EDU

Pure substance/mixture Mixture

Contains 2-Mercaptoethanol

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

Recommended use Laboratory chemicals

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, Life Science Group
2000 Alfred Nobel Drive
Hercules, California 94547
USA

Legal Entity / Contact Address
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

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Dermal	Category 4 - (H312)

Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1A - (H317)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains 2-Mercaptoethanol

Signal word
Danger

Hazard statements
H312 - Harmful in contact with skin
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P310 - Immediately call a POISON CENTER or doctor
P273 - Avoid release to the environment
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

2.3. Other hazards

Contains animal source material. (Cattle). Causes mild skin irritation. 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)
Urea 57-13-6	35 - 50	No data available	200-315-5	No data available	-	-	-
2-Mercaptoethanol 60-24-2	2.5 - 5	No data available	200-464-6	Acute Tox. 3 (H301) Acute Tox. 3 (H301) Acute Tox. 3 (H331) Acute Tox. 3 (H331) Eye Dam. 1 (H318) Skin Sens. 1A (H317) STOT RE 2 (H373) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)	-	-	-
1,2,3-Propanetriol	0.01 -	No data available	200-289-5	No data available	-	-	-

56-81-5	0.099						
Ethyl acrylate 140-88-5	0.001 - 0.01	No data available	205-438-8	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335) Flam. Liq. 2 (H225)	Eye Irrit. 2 :: C>=5% Skin Irrit. 2 :: C>=5% STOT SE 3 :: C>=5%	-	-
Sodium azide 26628-22-8	< 0.001	No data available	247-852-1	Acute Tox. 2 (H300) Acute Tox. 1 (H310) (EUH032) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-

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
Urea 57-13-6	8471	No data available	No data available	No data available	No data available
2-Mercaptoethanol 60-24-2	244	112	No data available	No data available	No data available
1,2,3-Propanetriol 56-81-5	12600	10000	2.75	No data available	No data available
Ethyl acrylate 140-88-5	550	1790	No data available	5.7732	No data available
Sodium azide 26628-22-8	27	20	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. Immediate medical attention is required.

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

Eye contact Get immediate medical advice/attention. 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.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

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. Wear personal protective clothing

(see section 8). Avoid contact with skin, eyes or clothing.

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

Symptoms Burning sensation. Itching. Rashes. Hives. Prolonged contact may cause redness and irritation.

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

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 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.

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

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.

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. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.

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. Store locked up. Keep out of the reach of children. 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
Urea 57-13-6	-	-	-	TWA: 10.0 mg/m³	-
1,2,3-Propanetriol 56-81-5	-	-	TWA: 10 mg/m³	-	TWA: 10 mg/m³
Ethyl acrylate 140-88-5	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	TWA: 5 ppm TWA: 20 mg/m³ STEL 10 ppm STEL 40 mg/m³ H* Skin sensitizer	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	STEL: 10 ppm STEL: 42 mg/m³ TWA: 5 ppm TWA: 21 mg/m³	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³ * Skin Sensitisation
Sodium azide 26628-22-8	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ *	TWA: 0.1 mg/m³ STEL 0.3 mg/m³ H*	*	STEL: 0.3 mg/m³ TWA: 0.1 mg/m³ K*	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ *

Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
1,2,3-Propanetriol 56-81-5	-	TWA: 10 mg/m³ Ceiling: 15 mg/m³	-	TWA: 10 mg/m³	TWA: 20 mg/m³
Ethyl acrylate 140-88-5	STEL: 42 mg/m³ STEL: 10 ppm TWA: 21 mg/m³ TWA: 5 ppm	TWA: 20 mg/m³ Ceiling: 40 mg/m³ * Sensitizer	TWA: 5 ppm TWA: 21 mg/m³ H*	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³ iho*
Sodium azide 26628-22-8	* STEL: 0.3 mg/m³ TWA: 0.1 mg/m³	TWA: 0.1 mg/m³ Ceiling: 0.3 mg/m³ *	TWA: 0.1 mg/m³ H*	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ A*	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ iho*

Chemical name	France	Germany	Germany MAK	Greece	Hungary
1,2,3-Propanetriol 56-81-5	TWA: 10 mg/m³	TWA: 200 mg/m³	TWA: 200 mg/m³ Peak: 400 mg/m³	TWA: 10 mg/m³	-
Ethyl acrylate 140-88-5	TWA: 5 ppm TWA: 21 mg/m³ STEL: 42 mg/m³ STEL: 10 ppm	TWA: 2 ppm TWA: 8.3 mg/m³ H*	TWA: 2 ppm TWA: 8.3 mg/m³ Peak: 4 ppm Peak: 16.6 mg/m³ * skin sensitizer	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	TWA: 21 mg/m³ STEL: 42 mg/m³ *

Sodium azide 26628-22-8	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ *	TWA: 0.2 mg/m³	TWA: 0.2 mg/m³ Peak: 0.4 mg/m³	TWA: 0.1 ppm TWA: 0.3 mg/m³ STEL: 0.1 ppm STEL: 0.3 mg/m³	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Urea 57-13-6	-	-	-	TWA: 10 mg/m³	TWA: 10 mg/m³
2-Mercaptoethanol 60-24-2	-	-	-	-	TWA: 1 mg/m³
Ethyl acrylate 140-88-5	TWA: 5 ppm TWA: 20 mg/m³ STEL: 10 ppm STEL: 41 mg/m³ Sk* Sensitizer	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	TWA: 5 ppm TWA: 20 mg/m³ STEL: 15 ppm STEL: 61 mg/m³	TWA: 10 mg/m³	Sensitizer TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³
Sodium azide 26628-22-8	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ Sk*	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ pelle*	Ceiling: 0.29 mg/m³ Ceiling: 0.11 ppm	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ *	* TWA: 0.1 mg/m³ STEL: 0.3 mg/m³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
1,2,3-Propanetriol 56-81-5	-	-	-	-	TWA: 10 mg/m³
Ethyl acrylate 140-88-5	STEL: 42 mg/m³ STEL: 10 ppm TWA: 21 mg/m³ TWA: 5 ppm	STEL: 42 mg/m³ STEL: 10 ppm TWA: 21 mg/m³ TWA: 5 ppm	TWA: 21 mg/m³ STEL: 42 mg/m³	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³ H*	STEL: 40 mg/m³ TWA: 20 mg/m³ *
Sodium azide 26628-22-8	* STEL: 0.3 mg/m³ TWA: 0.1 mg/m³	* STEL: 0.3 mg/m³ TWA: 0.1 mg/m³	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ H*	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³	STEL: 0.3 mg/m³ TWA: 0.1 mg/m³ *
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
1,2,3-Propanetriol 56-81-5	TWA: 10 mg/m³	-	TWA: 11 mg/m³	TWA: 200 mg/m³ STEL: 400 mg/m³	TWA: 10 mg/m³
Ethyl acrylate 140-88-5	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	TWA: 5 ppm TWA: 21 mg/m³ Sensitizer Ceiling: 42 mg/m³	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³ *	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³ sensitizer
Sodium azide 26628-22-8	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ Ceiling: 0.29 mg/m³ Ceiling: 0.11 ppm P*	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ *	TWA: 0.1 mg/m³ * Ceiling: 0.3 mg/m³	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ *	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ vía dérmica*

Chemical name	Sweden	Switzerland	United Kingdom
1,2,3-Propanetriol 56-81-5	-	TWA: 50 mg/m³ STEL: 100 mg/m³	TWA: 10 mg/m³ STEL: 30 mg/m³
Ethyl acrylate 140-88-5	NGV: 5 ppm NGV: 20 mg/m³ Bindande KGV: 10 ppm Bindande KGV: 40 mg/m³ Sensitizer	TWA: 2.5 ppm TWA: 10 mg/m³ STEL: 10 ppm STEL: 42 mg/m³	TWA: 5 ppm TWA: 21 mg/m³ STEL: 10 ppm STEL: 42 mg/m³
Sodium azide 26628-22-8	NGV: 0.1 mg/m³ Bindande KGV: 0.3 mg/m³	TWA: 0.2 mg/m³ STEL: 0.4 mg/m³	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³ Sk*

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) No information available.
Predicted No Effect Concentration (PNEC)

8.2. Exposure controls

Personal protective equipment

Eye/face protection	Tight sealing safety goggles.
Hand protection	Wear suitable gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.
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.
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

Property	Values	Remarks • Method
Melting point / freezing point	No data available	None known
Boiling point / boiling range	> 100 °C	
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	8.4	
pH (as aqueous solution)	No data available	No information available
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	
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 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 Strong acids. Strong bases. Strong oxidizing agents. 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. Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). May be absorbed through the skin in harmful amounts. Causes mild skin irritation. Harmful in contact with skin.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Itching. Rashes. Hives. Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral)	4,248.20 mg/kg
ATEmix (dermal)	1,346.60 mg/kg
ATEmix (inhalation-vapor)	24.60 mg/l

Unknown acute toxicity

47.34001 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Urea	= 8471 mg/kg (Rat)	-	-
2-Mercaptoethanol	= 244 mg/kg (Rat)	112 - 224 mg/kg (Rabbit)	-
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h
Ethyl acrylate	= 550 mg/kg (Rat)	= 1790 mg/kg (Rabbit)	= 1410 ppm (Rat) 4 h
Sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit)	0.054 - 0.52 mg/L (Rat) 4 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.

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

Respiratory or skin sensitization May cause an allergic skin reaction.

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 Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 1E-05 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Urea	-	LC50: 16200 - 18300mg/L (96h, Poecilia reticulata)	-	EC50: =3910mg/L (48h, Daphnia magna)
2-Mercaptoethanol	EC50: =12mg/L (72h, Desmodesmus subspicatus)	-	-	EC50: =1.52mg/L (48h, Daphnia magna)
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-
Ethyl acrylate	EC50: =48mg/L (72h, Desmodesmus subspicatus)	LC50: =4.6mg/L (96h, Oncorhynchus mykiss) LC50: 2.31 - 2.7mg/L (96h, Pimephales promelas)	-	EC50: =7.9mg/L (48h, Daphnia magna)
Sodium azide	-	LC50: =0.8mg/L (96h, Oncorhynchus mykiss) LC50: =0.7mg/L (96h, Lepomis macrochirus) LC50: =5.46mg/L (96h, Pimephales promelas)	-	-

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Urea	-1.73
2-Mercaptoethanol	-0.056
1,2,3-Propanetriol	-1.75
Ethyl acrylate	1.18

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
Urea	The substance is not PBT / vPvB PBT assessment does not apply
2-Mercaptoethanol	The substance is not PBT / vPvB
1,2,3-Propanetriol	The substance is not PBT / vPvB
Ethyl acrylate	The substance is not PBT / vPvB
Sodium azide	The substance is not PBT / vPvB PBT assessment does not apply

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

IATA

14.1 UN number or ID number	UN2810
14.2 UN proper shipping name	Toxic liquid, organic, n.o.s. (Ethyl acrylate, Sodium azide)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	III
Description	UN2810, Toxic liquid, organic, n.o.s. (Ethyl acrylate, Sodium azide), 6.1, III
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	A3, A4, A137

IMDG

14.1 UN number or ID number	UN2810
14.2 UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S. (Ethyl acrylate, Sodium azide)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	III
Description	UN2810, TOXIC LIQUID, ORGANIC, N.O.S. (Ethyl acrylate, Sodium azide), 6.1, III
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	223, 274
EmS-No	F-A, S-A
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number	UN2810
14.2 UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S. (Ethyl acrylate, Sodium azide)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	III
Description	UN2810, TOXIC LIQUID, ORGANIC, N.O.S. (Ethyl acrylate, Sodium azide), 6.1, III
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	274, 614
Classification code	T1

ADR

14.1 UN number or ID number	2810
14.2 UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S. (Ethyl acrylate, Sodium azide)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	III
Description	2810, TOXIC LIQUID, ORGANIC, N.O.S. (Ethyl acrylate, Sodium azide), 6.1, III
14.5 Environmental hazards	Not applicable

14.6 Special Precautions for Users

Special Provisions 274, 614
Classification code T1
Tunnel restriction code (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
Ethyl acrylate 140-88-5	RG 65	-

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

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 Annex XVII	Substance subject to authorization per REACH Annex XIV
Ethyl acrylate - 140-88-5	75.	-

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

Full text of H-Statements referred to under section 3
EUH032 - Contact with acids liberates very toxic gas
H225 - Highly flammable liquid and vapor
H300 - Fatal if swallowed
H301 - Toxic if swallowed

H302 - Harmful if swallowed
H310 - Fatal in contact with skin
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H331 - Toxic if inhaled
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H401 - Toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - 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
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	04-Oct-2022

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
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End of Safety Data Sheet