

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: UK REACH Regulations (SI 2019/758 as amended)

Revision date 11-Dec-2024 Revision Number 2

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

1.1. Product identifier

Product Name Oriole Fluorescent Gel Stain

Catalogue Number(s) 1610495, 1610496

Pure substance/mixture Mixture

Contains Methanol; Phosphoric acid

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

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

Bio-Rad Laboratories Inc.

Bio-Rad Laboratories, Life Science Group

Bio-Rad Laboratories Ltd

2000 Alfred Nobel Drive

The Junction

Hercules, CA 94547 Hercules, California 94547 Station Road USA Watford, WD17 1ET

UK

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

Acute toxicity - Oral	Category 3 - (H301)
Acute toxicity - Dermal	Category 3 - (H311)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 1 - (H370)
Corrosive to metals	Category 1 - (H290)
Flammable liquids	Category 2 - (H225)

2.2. Label elements

Contains Methanol; Phosphoric acid

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Signal word

Danger

Hazard statements

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H370 - Causes damage to organs

H290 - May be corrosive to metals

H225 - Highly flammable liquid and vapour

Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P260 - Do not breathe dust, fume, gas, mist, vapors and spray

P280 - Wear protective gloves, protective clothing, eye protection and 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

P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish

P403 + P235 - Store in a well-ventilated place. Keep cool

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

P337 + P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
				2020/1567 as amended)			
Methanol 67-56-1	20 - 35	200-659-6 (603-001-00-X)	-	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3	STOT SE 1 :: C>=10% STOT SE 2 :: 3%<=C<10%	-	-

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				(H331) STOT SE 1 (H370)			
Phosphoric acid 7664-38-2	1 - 2.5	231-633-2 (015-011-00-6)	-	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318)	Eye Irrit. 2 :: 10%<=C<25% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 10%<=C<25%		-
Ethyl alcohol 64-17-5	0.1 - 0.249	200-578-6 (603-002-00-5)	-	Flam. Liq. 2 (H225)	-	-	-
1-Methyl-2-pyrrolidon e 872-50-4	0.01 - 0.099	212-828-1 (606-021-00-7)	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Repr. 1B (H360D)	STOT SE 3 :: C>=10%	-	-

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

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK 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. IF exposed or

concerned: Get medical advice/attention. If symptoms persist, call a doctor. If breathing has

stopped, give artificial respiration. Get medical attention immediately.

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

Skin contactWash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Get immediate medical attention.

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

vomiting. Get immediate medical attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give

mouth-to-mouth resuscitation. Avoid breathing vapours or mists.

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

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

Difficulty in breathing.

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

Note to doctors Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

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

Unsuitable extinguishing mediaDo 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

Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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 Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing

vapours or mists.

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

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if

safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A

vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand

or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labelled containers.

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.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Do not eat, drink or smoke when using this product. 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. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Store according to product and label instructions.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	United Kingdom
Methanol	TWA: 200 ppm;
67-56-1	TWA: 266 mg/m³;
	STEL: 250 ppm;
	STEL: 333 mg/m³;
	pSk
Phosphoric acid	TWA: 1 mg/m ³ ;
7664-38-2	STEL: 2 mg/m³;
Ethyl alcohol	TWA: 1000 ppm;
64-17-5	TWA: 1920 mg/m ³ ;
	STEL: 3000 ppm;
	STEL: 5760 mg/m ³ ;
1-Methyl-2-pyrrolidone	TWA: 10 ppm;
872-50-4	TWA: 40 mg/m³;
	STEL: 20 ppm;
	STEL: 80 mg/m ³ ;
	pSk

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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)

No information available.

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

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

Antistatic boots.

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.

Do not eat, drink or smoke when using this product. Contaminated work clothing should not General hygiene considerations

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. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution Colour colourless Odour Alcohol.

Odour threshold No information available

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

Melting point / freezing point No data available None known

Initial boiling point and boiling range64.7 °C

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

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

11 °C Flash point

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

1.5-2.0

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

XGHS / BE Page 6/13 Water solubility Miscible in water

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

Bulk density

Liquid Density

Relative vapour density

No data available
No data available
No data available

Relative vapour density Particle characteristics

Particle Size No information available
Particle Size Distribution No information available

9.2. Other information

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 Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Excessive

heat.

10.5. Incompatible materials

Incompatible materials Oxidising agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

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

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

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

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

Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation (based

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on components). Toxic in contact with skin.

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

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

components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms 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) 294.20 mg/kg
ATEmix (dermal) 885.20 mg/kg
ATEmix (inhalation-dust/mist) 1.48 mg/l
ATEmix (inhalation-vapour) 123.00 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h
Phosphoric acid	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	= 3846 mg/m³ (Rat) 1 h
Ethyl alcohol	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat)4 h = 133.8 mg/L (Rat)4 h
1-Methyl-2-pyrrolidone	= 3914 mg/kg (Rat)	= 8 g/kg (Rabbit)	> 5.1 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. Causes skin irritation.

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

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

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

Chemical name	United Kingdom
1-Methyl-2-pyrrolidone	Repr. 1B

STOT - single exposure Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

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STOT - repeated exposure No information available.

Aspiration hazard No information available.

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.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methanol	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	-	-
Ethyl alcohol	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)
1-Methyl-2-pyrrolidone	EC50: >500mg/L (72h, Desmodesmus subspicatus)	LC50: =832mg/L (96h, Lepomis macrochirus) LC50: =1072mg/L (96h, Pimephales promelas) LC50: =1400mg/L (96h, Poecilia reticulata)	-	EC50: =4897mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Methanol	-0.77
Phosphoric acid	-0.9
Ethyl alcohol	-0.35
1-Methyl-2-pyrrolidone	-0.46

12.4. Mobility in soil

Mobility in soil No information available.

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12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Methanol	The substance is not PBT / vPvB
Phosphoric acid	The substance is not PBT / vPvB
Ethyl alcohol	The substance is not PBT / vPvB
1-Methyl-2-pyrrolidone	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number UN3286

14.2 UN proper shipping name Flammable liquid, toxic, corrosive, n.o.s. (Methanol Solution, Phosphoric acid)

14.3 Transport hazard class(es)
Subsidiary hazard class
14.4 Packing group
II

Description UN3286, Flammable liquid, toxic, corrosive, n.o.s. (Methanol Solution, Phosphoric acid), 3

(6.1, 8), II

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1 UN number or ID number UN3286

14.2 UN proper shipping name FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Methanol Solution, Phosphoric acid)

14.3 Transport hazard class(es) 3
Subsidiary hazard class 6.1, 8
14.4 Packing group ||

Description UN3286, FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Methanol Solution,

Phosphoric acid), 3 (6.1, 8), II, (11°C C.C.)

14.5 Environmental hazards

14.6 Special precautions for user

Special Provisions 274
EmS-No. F-E, S-C

14.7 Maritime transport in bulk according to IMO instruments

No information available

Not applicable

RID

14.1 UN number or ID number UN3286

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14.2 UN proper shipping name FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Methanol Solution, Phosphoric acid)

14.3 Transport hazard class(es) 3 Subsidiary hazard class 6.1, 8 14.4 Packing group II

Description UN3286, FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Methanol Solution,

Phosphoric acid), 3 (6.1, 8), II

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions 274 Classification code FTC

ADR

14.1 UN number or ID number 3286

14.2 UN proper shipping name FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Methanol Solution, Phosphoric acid)

14.3 Transport hazard class(es)
Subsidiary hazard class
14.4 Packing group
3
6.1, 8
II

Description 3286, FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Methanol Solution,

Phosphoric acid), 3 (6.1, 8), II

Not applicable

14.5 Environmental hazards

14.6 Special precautions for user

Special Provisions274Classification codeFTCTunnel restriction code(D/E)

SECTION 15: Regulatory information

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

National regulations

Authorisations and/or restrictions on use:

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Methanol - 67-56-1	Use restricted. See item 69.	-
1-Methyl-2-pyrrolidone - 872-50-4	Use restricted. See item 30.	-
	Use restricted. See item 71.	
	Use restricted. See item 72.	
	Restricted Reproductive Toxin 1B	

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH (SI 2015/483 as amended)

H3 - STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

P5a - FLAMMABLE LIQUIDS P5b - FLAMMABLE LIQUIDS

P5c - FLAMMABLE LIQUIDS

Named dangerous substances per COMAH (SI 2015/483 as amended)

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

The Ozone-Depleting Substances Regulations 2015

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Not applicable

The Biocidal Products Regulations 2001 (as amended)

Chemical name	The Biocidal Products Regulations 2001 (as amended)
Ethyl alcohol - 64-17-5	PT2
	PT4
	PT1

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended) Not applicable

Poisons and Explosive Precursors

Chemical name	Poisons and Explosive Precursors
Phosphoric acid	Explosive precursor, Regulated 30 % w/w

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 any hazard and/or precautionary statements referred to under Sections 2-15

H225 - Highly flammable liquid and vapour

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H335 - May cause respiratory irritation

H360D - May damage the unborn child

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 Sk* Skin designation

+ Sensitisers

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute oral toxicity

Acute dermal toxicity

Acute inhalation toxicity - gas

Acute inhalation toxicity - vapour

Method Used

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

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Acute inhalation toxicity - dust/mist Calculation method Skin corrosion/irritation On basis of test data Serious eye damage/eye irritation On basis of test data Respiratory sensitisation Calculation method Skin sensitisation Calculation method Mutagenicity Calculation method Carcinogenicity Calculation method Reproductive toxicity Calculation method STOT - single exposure Calculation method STOT - repeated exposure Calculation method Acute aquatic toxicity Calculation method Chronic aquatic toxicity Calculation method Aspiration hazard Calculation method Ozone Calculation method Corrosive to metals On basis of test data

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

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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)

U.S. 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 date 11-Dec-2024

Revision Note SDS sections updated

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This SDS complies with the requirements of UK REACH Regulations SI 2019/758 (as amended)

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

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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