

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

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

1.1 Product identifier

Trade name/designation:

Product No.:

CAS No.:

Index No.:

Not applicable

Not applicable

EU REACH No.: This product is a mixture. See section 3 for EU REACH registration numbers

when applicable.

Other means of identification: none

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

Relevant identified uses: General chemical reagent

Uses advised against: The product, as such or as a component of a mixture, is not intended to be

used by consumers (as defined by the REACH Regulation).

1.3 Details of the supplier of the safety data sheet

Ireland

VWR International Ltd.

Street Orion Business Campus, Northwest Business Park
Postal code/City Ballycoolin, Dublin 15, Republic of Ireland

Telephone +353 1 8822222 Telefax +353 1 8822333

E-mail (competent person) SDS@avantorsciences.com

1.4 Emergency phone number

Telephone +44 (0) 1270 502894 (CareChem24)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].





2.2 Label elements

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

According to EC directives or the corresponding national regulations the product does not have to be labelled.

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance that has endocrine disrupting properties.

SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

This mixture does not contain any substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Change contaminated, saturated clothing. Wash contaminated clothing before reuse. Do not leave affected person unattended.

After inhalation

Remove casualty to fresh air and keep warm and at rest. Obtain medical attention if symptoms appear.

In case of skin contact

Gently wash with plenty of soap and water. In case of skin reactions, consult a physician.

After eye contact:

 $Rinse\ immediately\ carefully\ and\ thoroughly\ with\ eye-bath\ or\ water.\ Obtain\ medical\ attention\ if\ symptoms\ appear.$

In case of ingestion

Rinse mouth thoroughly with water. Call a doctor if you feel unwell.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

No known symptoms to date.

4.3 Indication of any immediate medical attention and special treatment needed

No special information on medical attention and special treatment available.





SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

ABC-powder Carbon dioxide (CO2). Dry sand Nitrogen

Extinguishing media which must not be used for safety reasons

Water spray. Full water jet

5.2 Special hazards arising from the substance or mixture

The product itself does not burn.

Substance is non-flammable. Adapt fire and explosion protection measures to the combustible substances in the area.

Fire may produce irritating, corrosive and/or toxic gases.

In case of fire may be liberated:

Pyrolysis products, toxic

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Co-ordinate fire-fighting measures to the fire surroundings.

In case of fire: Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Remove victim out of the danger area. First Aid, decontamination, treatment of symptoms. For emergency responders: Wear a self-contained breathing apparatus and chemical protective clothing. Substance is non-flammable. Adapt fire and explosion protection measures to the combustible substances in the area. In case of major fire and release of large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

6.2 Environmental precautions

No special environmental measures are necessary.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Dispose according to local legislation.

6.4 Reference to other sections

Personal protection equipment: see section 8 Disposal information: see section 13





SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

No special measures are necessary.

Measures to prevent fire, aerosol and dust generation

No special measures are necessary.

Measures required to protect the environment

No special measures are necessary.

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: no data available

Storage class: no data available

Store in a well-ventilated place. Keep container tightly closed. Packaging materials: High density polyethylene (HDPE) Unsuitable container/equipment material: Metal container

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

Recommended monitoring procedures:

European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents)

European Standard EN 482 (Workplace exposure. Procedures for the determination of the concentration of chemical agents - Basic performance requirements)

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

8.2.2 Personal protection equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.

Eye/face protection

Eye glasses with side protection DIN-/EN-Norms EN 166

Recommendation: VWR 111-0432

Skin protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms EN ISO 374 In the case of wanting to use the gloves again, clean them before taking off and air them well.





By short-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm

Breakthrough time: 480 min

Recommended glove articles: VWR 112-0998

By long-term hand contact

Respiratory protection

Usually no personal respirative protection necessary.

Suitable respiratory protection apparatus: no data available
Recommendation: no data available
Suitable material: no data available
Recommendation: no data available

Additional information

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

8.2.3 Environmental exposure controls

no data available





SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: solid
Colour: pink
Odour: odourless

Safety relevant basic data

pH: no data available
Melting point/freezing point: no data available
Initial boiling point and boiling range: no data available
Flash point: no data available
Flammability: Not applicable

Lower and upper explosion limit

Lower explosion limit: no data available
Upper explosion limit: no data available
Vapour pressure: no data available
Relative vapour density: no data available

Density and/or relative density

Density: 1.0 g/cm³ (20 °C)

Solubility(ies)

Water solubility: no data available
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature: no data available
Decomposition temperature: Not applicable

Viscosity

Kinematic viscosity: no data available

Dynamic viscosity: no data available

Particle characteristics: no nanoform

9.2 Other information

no data available Evaporation rate: Explosive properties: no data available Oxidising properties: Not applicable Bulk density: no data available Refraction index: no data available Dissociation constant: no data available no data available Surface tension: Henry's Law Constant: no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is non-reactive under normal conditions.





10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials:

No further relevant information available.

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

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

Acute effects

Acute oral toxicity:

Based on available data, the classification criteria are not met.

Acute dermal toxicity:

Based on available data, the classification criteria are not met.

Acute inhalation toxicity:

Based on available data, the classification criteria are not met.

Irritant and corrosive effects:

Primary irritation to the skin:

Not applicable

Irritation to eyes:

Not applicable

Irritation to respiratory tract:

Not applicable





Respiratory or skin sensitisation

In case of skin contact: not sensitising After inhalation: not sensitising

STOT-single exposure

Not applicable

STOT-repeated exposure

Not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

Not applicable

Other adverse effects

no data available

Additional information

no data available

11.2 Information on other hazards

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity:

no data available

Daphnia toxicity:

no data available

Algae toxicity:

no data available

Bacteria toxicity:

no data available





12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil:

no data available

12.5 Results of PBT/vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to the environment.

12.7 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

Appropriate disposal / Package

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

European waste management legislation

Directive 2008/98/EC (Waste Framework Directive)

National waste management legislation

Act No. 10/1996 - Waste Management Act, 1996

Act No. 36/2001 - Waste Management (Amendment) Act, 2001

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN number or ID number: No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name: not assigned

14.3 Transport hazard class(es): none

14.4 Packing group: not assigned

14.5 Environmental hazards: none

14.6 Special precautions for user: none





Sea transport (IMDG)

14.1 UN number or ID number: No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name: not assigned

14.3 Transport hazard class(es): none

14.4 Packing group: not assigned

14.5 Environmental hazards: none
14.6 Special precautions for user: none

14.6 Special precautions for user: none
 14.7 Maritime transport in bulk according to IMO not relevant

instruments

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number: No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name: not assigned

14.3 Transport hazard class(es): none

14.4 Packing group: not assigned

14.5 Special precautions for user: none

SECTION 15: Regulatory information

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

EU legislation

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance)
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance)
- Commission Regulation (EU) 2020/878 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

National regulations

no data available

Water hazard class: no data available

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.





SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)

CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures

DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)

DNEL - Derived No Effect Level

Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

KOSHA - Korea Occupational Safety and Health Agency

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PNEC - Predicted No Effect Concentration

RID - Regulation concerning the International Carriage of Dangerous Goods by Rail

STV - Short Term Value

SVHC - Substances of Very High Concern

vPvB - very Persistent, very Bioaccumulative

Key literature references and sources for data

This Safety Data Sheet has been prepared based on information available for public as TOXNET information, European Chemicals Agency (ECHA) substance dossier, papers from international cancer research institutes (IARC Monographs), U.S. National Toxicology Program data, U.S. Agency for Toxic Substances and Disease Control (ATSDR), PubChem websites and SDS from our raw material manufacturers.

Additional information

Indication of changes Section 11

If you need an explanation of the change, contact the supplier (SDS@avantorsciences.com).

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

