

Version: 1.1

Revision date: 08.08.2022

Safety Data Sheet

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: Identification

Product identifier

Trade name/designation: Polysorbate 80, N.F. Multi-Compendial

Product No.: 4117 Synonymes: none

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

Recommended Use For Laboratory, Research or Manufacturing Use.

Uses advised against Not determined.

Details of the supplier of the safety data sheet

Supplier

Avantor Performance Materials, LLC.

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Emergency phone number

Telephone +1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA

and Canada)

Preparation Information

Product Information Compliance

E-mail SDS@avantorsciences.com

SECTION 2: Hazard identification

Classification of the substance or mixture

This substance is classified as not hazardous according to regulation 29 CFR 1910.1200 (OSHA HCS).

Label elements

According to regulation 29 CFR 1910.1200 (OSHA HCS) the product does not have to be labelled.

Hazard(s) not otherwise classified (HNOC)

none



SECTION 3: Composition / information on ingredients

Substances

Substance name Polysorbate 80

Molecular formula

Molecular weight no data available

CAS No. 9005-65-6

SECTION 4: First aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

Most important symptoms/effects, acute and delayed

no data available

Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Fire fighting measures

Extinguishing media

Suitable extinguishing media

The product itself does not burn.

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

Extinguishing media which must not be used for safety reasons

no restriction

Specific hazards arising from the chemical

In case of fire may be liberated: Pyrolysis products, toxic

Advice for firefighters

DO NOT fight fire when fire reaches explosives.



Protective equipment and precautions for firefighters

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

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

Environmental precautions

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

Additional information

Clear spills immediately.

SECTION 7: Handling and storage

Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:

Inhalation

skin contact

Eye contact

Use extractor hood (laboratory).

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

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.

Conditions for safe storage, including any incompatibilities

Recommended storage temperature: no data available

Keep container tightly closed and in a well-ventilated place. Keep/Store only in original container.

SECTION 8: Exposure controls/personal protection

Control parameters

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

Engineering controls

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.



Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

By short-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm
Breakthrough time: > 480 min

By long-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,38 mm
Breakthrough time: > 480 min

Respiratory protection

Usually no personal respirative protection necessary.

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.

Environmental exposure controls

no data available



SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

(a) Appearance

Physical state: liquid
Color: dark yellow
(b) Odor: no data available
(c) Odor threshold: no data available

Safety relevant basic data

(d) pH: 5-7 (50 g/l; H2O; 20 °C)

(e) Melting point/freezing point: -21 °C

(f) Initial boiling point and boiling range: 100 °C (1013 hPa) (g) Flash point: 149 °C (closed cup) (h) Evaporation rate: no data available (i) Flammability (solid, gas): not applicable

(j) Flammability or explosive limits

Lower explosion limit:
Upper explosion limit:
no data available
no data available
no data available
1.33 hPa (20 °C)
no data available
no data available
1.062 g/cm³ (20 °C)

(n) Solubility(ies)

Water solubility: soluble (20 °C)
Soluble (g/L) in Ethanol: no data available

(o) Partition coefficient: n-octanol/water: no data available

(p) Auto-ignition temperature: 180 °C

(q) Decomposition temperature: not applicable

(r) Viscosity

Kinematic viscosity: 300-500 cSt (20°C)
Dynamic viscosity: no data available
(s) Explosive properties: not applicable
(t) Oxidising properties: not applicable

Other information

Bulk density:

Refraction index:

Dissociation constant:

Surface tension:

Henry's Law Constant:

no data available
no data available
no data available

SECTION 10: Stability and reactivity

Reactivity

no data available

Chemical stability

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



Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Incompatible materials

no data available

Hazardous decomposition products

no data available

SECTION 11: Toxicological information

Information on toxicological effects

Acute effects

Acute oral toxicity:

LD50: 34500 µL/kg - Rat - (National Library of Medicine ChemID Plus (NLM CIP))

Acute dermal toxicity: no data available

Acute inhalation toxicity:

no data available

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 sensitization

In case of skin contact: not sensitizing In case of inhalation: not sensitizing

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

SECTION 12: Ecological information

Ecotoxicity

Fish toxicity:

no data available

Daphnia toxicity:

no data available

Algae toxicity:

no data available

Bacteria toxicity:

no data available

Persistence and degradability

no data available

Bioaccumulative potential

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

Mobility in soil:

no data available

Other adverse effects

no data available

SECTION 13: Disposal considerations

Waste treatment methods

Appropriate disposal / Product

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

Appropriate disposal / Package

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

SECTION 14: Transport information

Land transport (DOT)

No dangerous good in sense of this transport regulation.

Sea transport (IMDG)

No dangerous good in sense of this transport regulation.



Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

National regulations

Toxic Substances Control Act (TSCA)

Listed

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 313 Components

Not listed.

Massachusetts Right To Know Components

Not listed.

Pennsylvania Right To Know Components

Not listed.

New Jersey Right To Know Components

Not listed.

California Prop. 65 Components

Not listed.



SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

DOT - Department of Transportation

IARC - International Agency for Research on Cancer

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

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PEL - Permissible Exposure Limit

STV - Short Term Value

SVHC - Substances of Very High Concern

TDG - Transport of Dangerous Goods

TLV - Threshold Limit Value

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.

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08.08.2022	1.1	2022-08-08

Additional information

Indication of changes: Section 3

If you need an explanation of the change, contact the

supplier (SDS@avantorsciences.com).

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