SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Millipore®

Version 7.5 Revision Date 24.09.2022 Print Date 24.10.2022 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

| 1.1 | Product identifiers Product name | : | MCE 0.025UM WH PL 90MM 25/PK |
|-----|---|-----|--|
| | Product Number Catalogue No. Brand REACH No. | : | VSWP09025 638166 Millipore Not applicable |
| 12 | Relevant identified u | 666 | of the substance or mixture and uses advised against |

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

Identified uses : Filtration

1.3 Details of the supplier of the safety data sheet Company : Sigma-Aldrich Chemie GmbH

| | . , | | Eschenstrasse 5 D-82024 TAUFKIRCHEN | |
|-----|--|---|--|---|
| 1.4 | Telephone Fax E-mail address Emergency telephone | : | +49 (0)89 6513-1130 +49 (0)89 6513-1161 technischerservice@merckgroup.com | Lieferant Supplier: |
| | Emergency Phone # | : | +49 (0)89 6513-1161 technischerservice@merckgroup.com 0800 181 7059 (CHEMTREC Deutschlan +49 (0)696 43508409 (CHEMTREC weltweit) | nd) ri Roth Givenperlenstr. 3 Choemperlenstr. 3 |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Flammable solids (Category 1), H228 Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Signal Word

Labelling according Regulation (EC) No 1272/2008 Pictogram



Danger

Hazard statement(s) H228

Flammable solid.

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| H412 | Harmful to aquatic life with long lasting effects. | | |
|-----------------------------------|--|--|--|
| Precautionary statement(s) | | | |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. | | |
| P240 | Ground and bond container and receiving equipment. | | |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. | | |
| P273 | Avoid release to the environment. | | |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. | | |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. | | |
| Supplemental Hazard Statements | none | | |
| Reduced Labeling (<= 125 ml) | | | |
| Dictogram | | | |

| Reduced Labeling | y(-125) |
|------------------|------------|
| Pictogram | |
| | <u>(7)</u> |

| | \mathbf{V} |
|-----------------------------------|--|
| Signal Word | Danger |
| Hazard statement(s) H412 | Harmful to aquatic life with long lasting effects. |
| Precautionary statement(s) | none |
| Supplemental Hazard Statements | none |

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Component | | Classification | Concentration | | |
|--|-----------|------------------------------|---------------|--|--|
| Octylphenol polyethoxyethanol Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) | | | | | |
| CAS-No. | 9036-19-5 | Acute Tox. 4; Skin Irrit. 2; | >= 0,25 - < 1 | | |
| | | Eye Dam. 1; Aquatic Acute | % | | |
| | | 1; Aquatic Chronic 1; | | | |
| | * | H302, H315, H318, H400, | | | |
| | | H410 | | | |
| | | M-Factor - Aquatic Acute: | | | |
| | | 10 - Aquatic Chronic: 1 | | | |

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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SECTION 4: First aid measures

4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides Combustible. Spontaneous ignition at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire. Fire may cause evolution of: nitrogen oxides, nitrous gases

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

- **6.3 Methods and materials for containment and cleaning up** Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
- **6.4** Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep away from heat and sources of ignition. Keep away from direct sunlight.Performing regular visual inspections of membranes and keeping accurate records of recommended shelf life can reduce the risk of membrane deterioration. Shelf-life limited when kept above +25°C. Recommended storage humidity: 30 - 70 %. Verify on a regular basis housekeeping, temperature and humidity. Designated "Flammable Material" storage areas must be engineered according to local regulations. Rotate stock. Improper storage conditions can accelerate deterioration of the membrane in advance of expiration date. Perform regular visual inspections of stored materials to ensure early stages of deterioration. Advanced stages of deterioration: visible liquid or solid brown resin. If membrane shows visual indications of deterioration, safely dispose of product according to local regulations. Storage under improper conditions could lead to the membrane self-decomposing at ambient temperatures with the formation of nitrous vapors or self ignition. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 4.1B: Flammable solid hazardous materials

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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

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Respiratory protection

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties

a) Physical state solid

colored

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b) Color

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| c) | Odor | No data available |
|----|--|--|
| d) | Melting point/freezing point | No data available |
| e) | Initial boiling point and boiling range | No data available |
| f) | Flammability (solid, gas) | The substance or mixture is a flammable solid with the category 1. |
| g) | Upper/lower flammability or explosive limits | No data available |
| h) | Flash point | No data available |
| i) | Autoignition temperature | No data available |
| j) | Decomposition temperature | No data available |
| k) | рН | No data available |
| I) | Viscosity | Viscosity, kinematic: No data available Viscosity, dynamic: No data available |
| m) | Water solubility | No data available |
| n) | Partition coefficient: n-octanol/water | No data available |
| o) | Vapor pressure | No data available |
| p) | Density | No data available |
| | Relative density | No data available |
| q) | Relative vapor density | No data available |
| r) | Particle characteristics | No data available |

- s) Explosive properties Not classified as explosive.
- t) Oxidizing properties none

9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

Product is sensitive to light and moisture. Prolonged exposure to air may cause discolouration.

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10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with: Oxidizing agents Bases Strong acids

- **10.4 Conditions to avoid** Heating (decomposition). Exposure to sunlight.
- **10.5 Incompatible materials** No data available
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity Carcinogenicity - No data available

Reproductive toxicity No data available

Reproductive toxicity - No data availableDevelopmental Toxicity - No data available**Specific** target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

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11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Risk of methaemoglobin formation. After uptake:

Risk of methaemoglobin formation.

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

Components

Octylphenol polyethoxyethanol

Acute toxicity

LD50 Oral - Rat - 1.900 - 5.000 mg/kg Remarks: (External MSDS) Symptoms: Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis. Inhalation: No data available LD50 Dermal - Rabbit - > 3.000 mg/kg Remarks: (External MSDS)

Skin corrosion/irritation

Skin - Rabbit Result: irritating - 4 h (OECD Test Guideline 404) Remarks: The value is given in analogy to the following substances: 4-(1,1,3,3tetramethylbutyl)phenol

Serious eye damage/eye irritation

Eyes - Rabbit Result: Risk of serious damage to eyes. (Draize Test) Risk of corneal clouding.

Respiratory or skin sensitization

Sensitisation test: - Human Result: negative Remarks: (External MSDS) Patch test on human volunteers did not demonstrate sensitization properties.

Germ cell mutagenicity

No data available

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Carcinogenicity

No data available

Reproductive toxicity

Ingestion of excessive amounts by pregnant animals resulted in maternal and fetal toxicity. Did not show teratogenic effects in animal experiments.

Specific target organ toxicity - single exposure

Acute oral toxicity - Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Risk of aspiration upon vomiting., Aspiration may cause pulmonary edema and pneumonitis.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

| Toxicity to daphnia and other aquatic | Remarks: No data available |
|--|--------------------------------|
| invertebrates | |
| Taviaity to also a | Demonstrat, No. data available |

Toxicity to algae Remarks: No data available

Toxicity to bacteria Remarks: No data available

- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties <u>Product:</u>

Assessment

: This substance/mixture contains components considered to have endocrinedisrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

12.7 Other adverse effects

Discharge into the environment must be avoided.

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Components

Octylphenol polyethoxyethanol

| Toxicity to fish | semi-static test LC50 - Leuciscus idus (Golden orfe) - 0,26 mg/l - 96 h (OECD Test Guideline 203) Remarks: The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol |
|---|--|
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - 0,011 mg/l - 48 h Remarks: (ECOTOX Database) The value is given in analogy to the following substances: 4- (1,1,3,3-tetramethylbutyl)phenol |
| Toxicity to algae | static test EC50 - Pseudokirchneriella subcapitata (green algae) - 1,9 mg/l - 96 h Remarks: (ECHA) The value is given in analogy to the following substances: 4- (1,1,3,3-tetramethylbutyl)phenol |

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

| SECT | 'ION 14: T | ransport informat | ion | |
|------|--------------------------------|--------------------------------|---|------------|
| 14.1 | UN numb ADR/RID: | | IMDG: 3270 | IATA: 3270 |
| 14.2 | | NITROCELLULOSE | MEMBRANE FILTERS MEMBRANE FILTERS brane filters | |
| 14.3 | Transpor ADR/RID: | t hazard class(es) 4.1 | IMDG: 4.1 | IATA: 4.1 |
| 14.4 | Packagin ADR/RID: | | IMDG: II | IATA: II |
| 14.5 | Environm ADR/RID: | nental hazards no | IMDG Marine pollutant: no | IATA: no |
| 14.6 | Special p No data av | recautions for use vailable | r | |

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SECTION 15: Regulatory information

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

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

Authorisations and/or restrictions on use

REACH - Candidate List of Substances of Very : Octylphenol polyethoxyethanol High Concern for Authorisation (Article 59).

This product contains a substance listed on Annex XIV of the REACH Regulation (EC) Nr. 1907/2006.

Listed substance / Sunset Date

: Octylphenol polyethoxyethanol / 04.01.2021

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

National legislation

Seveso III: Directive 2012/18/EU of the European : ENVIRONMENTAL HAZARDS Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

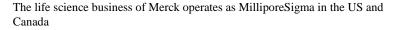
SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

| H228 | Flammable solid. |
|------|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

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Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM -American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. -Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

| Classification of the | e mixture | Classification procedure: |
|-----------------------|-----------|--|
| Flam. Sol.1 | H228 | Based on product data or assessment |
| Aquatic Chronic3 | H412 | Calculation method |

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