

# **SAFETY DATA SHEET**

Version 6.6 Revision Date 09/07/2024 Print Date 09/08/2024

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

#### 1.1 Product identifiers

Product name : 12-Hydroxy-octadecanoic acid polymer with

a-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl)

Product Number : 42966
Brand : Sigma
CAS-No. : 70142-34-6

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

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption

(40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by

MilliporeSigma.

## 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.

3050 SPRUCE ST ST. LOUIS MO 63103 UNITED STATES

Telephone : +1 314 771-5765 Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-

527-3887 CHEMTREC (International) 24

Hours/day; 7 Days/week

### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin sensitization (Category 1), H317 Short-term (acute) aquatic hazard (Category 3), H402 Long-term (chronic) aquatic hazard (Category 3), H412

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

## 2.2 GHS Label elements, including precautionary statements

Pictogram

**(!)** 

Signal Word Warning

**Hazard Statements** 

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements** 

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P272 Contaminated work clothing should not be allowed out of the

workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment (see supplemental first aid instructions on

this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/ container to an approved waste disposal

plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : Polyethylene glycol 15-hydroxystearate

Macrogol 15-hydroxystearate

Polyoxyethylated12-Hydroxystearic acid

CAS-No. : 70142-34-6

Component	Classification	Concentration		
12-Hydroxy-octadecanoic acid polymer with $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)				
	Skin Sens. 1; Aquatic Acute 3; Aquatic Chronic	<= 100 %		
	3; H317, H402, H412			

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



#### **SECTION 4: First aid measures**

# 4.1 Description of first-aid measures

#### **General advice**

Show this material safety data sheet to the doctor in attendance.

#### 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. Consult a physician.

### In case of eye contact

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

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

## 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

## 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

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

## **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

Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of vapours/aerosols or dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

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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 with suitable equipment. Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

## **Storage conditions**

Tightly closed. Dry.

## Storage class

Storage class (TRGS 510): 11: Combustible Solids

## 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**

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

## **Appropriate engineering controls**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

## Personal protective equipment

#### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

protective clothing

## **Respiratory protection**

Recommended Filter type: Filter type ABEK-P

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. required when dusts/vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### 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) Appearance Form: paste

Color: white, colorless

b) Odor odorless

c) Odor Threshold No data available

d) pH 6 - 7 at 100 g/l at 20 °C (68 °F)

e) Melting Freezing point: 25 - 30 °C (77 - 86 °F)

point/freezing point

f) Initial boiling point No data available

and boiling range

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g) Flash point 272 °C (522 °F)
 h) Evaporation rate No data available
 i) Flammability (solid, qas)

j) Upper/lower flammability or explosive limits No data available

k) Vapor pressure < 0.01 hPa at 100 °C (212 °F)

I) Vapor density No data available

m) Density 1.03 g/cm3 at 60 °C (140 °F)1.048 g/cm3 at 20 °C (68 °F)

Relative density No data available

n) Water solubility 200 g/l at 30 °C (86 °F)

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

p) Autoignition temperature

No data available

q) Decomposition temperature

> 300 °C (> 572 °F) -

r) Viscosity No data available

s) Explosive properties Not explosive

t) Oxidizing properties No data available

## 9.2 Other safety information

No data available

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

## 10.2 Chemical stability

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

#### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Strong heating.

# 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

In the event of fire: see section 5

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## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## **Acute toxicity**

LD50 Oral - Rat - 20,600 mg/kg Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation (OECD Test Guideline 404) Remarks: No data available

## Serious eye damage/eye irritation

Remarks: No data available

### Respiratory or skin sensitization

- Guinea pig

May cause sensitization by skin contact.

(OECD Test Guideline 406)

## **Germ cell mutagenicity**

Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

## Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

### Reproductive toxicity

Did not show teratogenic effects in animal experiments.

Animal testing did not show any effects on fertility.

### Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### **Aspiration hazard**

No data available

#### 11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish LC50 - other fish - > 100 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 100 mg/l - 48 h

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h

## 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 21 d

(OECD Test Guideline 301) aerobic - Exposure time 14 d (OECD Test Guideline 302)

#### 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

# 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No data available

### **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

### **SECTION 14: Transport information**

DOT (US)

Not dangerous goods

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#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

#### **Further information**

Not classified as dangerous in the meaning of transport regulations.

# **SECTION 15: Regulatory information**

## SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)

SARA 311/312

Hazards

: Acute Health Hazard

SARA 313 : This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by

SARA Title III, Section 313.

## **US State Regulations**

## **Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know

12-Hydroxy-octadecanoic acid polymer with  $\alpha$ -hydro- 70142-34-6  $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)

## **New Jersey Right To Know**

12-Hydroxy-octadecanoic acid polymer with  $\alpha$ -hydro- 70142-34-6  $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)

#### California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

### The ingredients of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

## **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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### **SECTION 16: Other information**

#### **Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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