

Safety Data Sheet

According to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP and GHS).

> Comply with EU regulations CEN/TS 164, EN 15039 used for treatment of water intended for human consumption

Version: 5 Language: Labelling pursuant to CLP regulation

Revision date: 30.01.2019 ΕN

1. Identification of the substance or preparation

RPI-7000

REACH registration number: Downstream User

Use of the substance / preparation: Reverse Osmosis Antiscalant

Company/undertaking identification

Manufacturer & Supplier: Toray Membrane Europe AG Grabenackerstrasse 8b

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Toray Membrane Europe AG

Department responsible for information:

Toray Membrane Europe AG

2. Hazards identification

Classification of the substance or mixture

Regulation (EC) No 1272/2008:

Directive 67/548/EEC:

Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms:

No Hazard Pictogram, No Signal Word No cautionary Statement

H phrases:

P phrases: 102 Keep out of reach of children.

270 Do no eat, drink or smoke when using this product.

305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Labelling according to Directive 67/548/EEC

Hazard symbols:

-

R phrases:

S phrases: 1/2 Keep locked up and out of the reach of children.

13 Keep away from food, drink and animal feeding stuffs.

20/21 When using do not eat, drink or smoke.

In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

3. Composition/information on ingredients

Chemical characterization (substance):

Aqueous solution sodium salt of a sulfonated acrylic acid copolymer.

Contains components listed below:

Acrylate, Copolymer (sulfonated)

Content: 20 - 50 Wt-%

EINECS-No.: -CAS-No.: -Classification: -

Additional information:

This preparation does not contain harmful substances and/or substances hazardous to the environment in accordance with the substance directive 67/548/EC or substances to which occupational exposure limit values are allocated.

4. First Aid measures

General information: No special measures are necessary.

After inhalation: Provide fresh air. Seek medical attention if problems persist.

After skin contact: After contact with skin, wash immediately with plenty of water and

soap. In case of skin irritation, seek medical treatment.

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After eye contact: In case of contact with eyes, rinse immediately with plenty of flowing

water for 10 to 15 minutes holding eyelids apart. Subsequently

consult an ophthalmologist.

After ingestion: Rinse mouth immediately and drink large quantities of water. Do not

induce vomiting. Seek medical attention if problems persist.

Self-protection of the first aider: No special measures are necessary.

Information to physician:

Symptoms: No symptoms known up to now.

Nature of Hazard: None

Treatment: Treat symptomatically.

5. Fire fighting measures

General information:

Extinguishing materials should be selected according to the surrounding area. The product itself is not combustible.

Suitable extinguishing media:

Carbon dioxide (CO2). Dry extinguishing powder. Water fog. Foam.

Extinguishing media which must not be used for safety reasons:

High power water jet.

Special exposure hazards arising from the substance itself, combustion products, resulting gases:

Carbon dioxide. Carbon monoxide. Pyrolysis products, toxic.

Special protective equipment for fire-fighters:

In case of fire: Wear self-contained breathing apparatus. Protective clothing.

Additional information:

Contaminated fire-fighting water must be collected separately.

6. Accidental release measures

Personal precautions:

See protective measures under point 7 and 8.

Environmental precautions:

No special environmental protection measures are necessary.

Methods for cleaning up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section on waste disposal.

Additional information:

None

7. Handling and storage

Handling

Information for safe handling:

No special handling instructions are necessary.

Technical measures and storage conditions:

Provide for sufficient ventilation and punctiform suction at critical points.

Precautions against fire and explosion:

No special precautionary measures are necessary.

Additional information:

None

Storage

Technical measures and storage conditions:

Maximum storage temperature: 30 °C Minimum storage temperature: 5 °C

Packaging materials:

Keep only in the original container.

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place. Protect against: frost.

Information about storage in one common storage facility:

Do not store together with: Food and fodder

Further information concerning storage conditions:

Store in good hygienic condition.

Storage class: 12

Specific use(s):

Observe instructions for use.

8. Exposure controls / Personal protection

Critical values of exposure:

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

Components with workplace or biological limit values to be monitored:

Limitation and monitoring of exposure

Exposure limit values:

refer to chapter 7. No further action is necessary.

Respiratory protection:

With correct and proper use, and under normal conditions, breathing protection is not required.

Hand protection:

Suitable gloves type: Pull-over gloves of rubber.

Eye protection:

Splash proof safety goggles.

Body protection:

Protective clothing.

Environmental exposure controls:

refer to chapter 7. No further action is necessary.

General protection and hygiene measures:

Do not eat, drink, smoke or sniff at the workplace. Wash hands before breaks and at the end of work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

9. Physical and chemical properties

Form: liquid
Colour: amber
Odour: characteristic

pH: 4,0-4,6 Melting point / melting range: $0 \, ^{\circ}\text{C}$ Boiling temperature / boiling range: $100 \, ^{\circ}\text{C}$

Flash point:

Flammability:

Explosion hazard:

Lower explosion limit:

Upper explosion level:

No data available
No data available
No data available
No data available

Ignition temperature (AIT): > 100 °C

Oxidizing properties:No data availableVapour pressure:22,7 hPa (20 °C)Relative density:1,07 - 1,13 g/cm³

Solubility in water: (g/l): unlimited

Fat solubility: (g/l): No data available Solubility in organic solvent: No data available Partition coefficient (n-octanol / water) (log P O/W): No data available Viscosity: No data available Relative vapour density at 20°C: No data available Speed of vaporization/evaporation rate: No data available Solvent separation test (%): No data available Solvent content (%): No data available **Bulk density:** not applicable

Additional information:

None

10. Stability and reactivity

Conditions to avoid:

Not to be used with water containing high levels of Aluminium (III) as a fine precipitate might form under certain condition.

Materials to avoid:

None

Dangerous reactions:

None

Hazardous decomposition products:

Carbon dioxide. Carbon monoxide. Pyrolysis products, toxic.

11. Toxicological information

Acute toxicity:

There are no data available on the preparation/mixture itself.

Specific symptoms from animal test:

Acute toxicity, dermal (LD50): Rat > 2000 mg/kg

Irritation and etching

Irritation effect on the skin: Not an irritant.
Irritation effect on the eye: Not an irritant.

Sensitization:

There are no data available on the preparation/mixture itself.

Effect after repeated or prolonged exposure:

There are no data available on the preparation/mixture itself.

CMR effects (carcinogen, mutagenic and toxicity for reproduction):

There are no data available on the preparation/mixture itself.

Additional information:

There are no data available on the preparation/mixture itself.

Practical experience:

None

Other observations:

None

General remarks:

According to our experience and the information available to us, the product has no negative impact on health.

12. Ecological information

General information:

None

Ecotoxicity:

Acute fish toxicity (LC50): Pimephales promelas (Fathead minnow) > 1000 mg/l (96 h)

Acute Daphnia toxicity (EC50): Daphnia magna (Water flea) 837 mg/l (48 h)

Algae toxicity (EC50): Selenastrum capricornutum 25 mg/l (96 h)

Mobility:

There are no data available on the mixture itself.

Persistence and Biodegradation:

Product is not easily biodegradable.

Bioaccumulative potential:

There are no data available on the mixture itself.

Results of PBT assessment:

There are no data available on the mixture itself.

Other harmful effects:

There are no data available on the mixture itself.

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Further ecological information:

None

13. Disposal considerations

General information:

Can be incinerated together with household waste in compliance with official regulations after consulting approved waste disposal companies and authorities in charge.

Waste Code

The assignment of waste codes / waste designations is done according to the European directory of waste codes (AVV) and to specific processes. The final user must redefine and assign the most appropriate Waste Catalogue Code.

Contaminated packaging:

Cleaned and empty containers may be recycled. Handle contaminated packaging in the same way as the substance itself.

Additional information:

Waste disposal according to official state regulations.

14. Transport information

Overland transport (ADR/RID)

Technical name:

ROPUR RPI-7000

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UN-No.: -

Label: - Packing Group: - warning sign: -

Remark: Not a hazardous material with respect to these transportation regulations.

Transport by sea (IMDG)

Proper Shipping name:

ROPUR RPI-7000

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UN-No.: -

Label: - Packing group:

EmS-No: - MFAG: - Marine pollutant: no

Special

Provisions:

Remark: Not a hazardous material with respect to these transportation regulations.

Air transport (ICAO-TI / IATA-DGR)

Proper Shipping name:

ROPUR RPI-7000

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UN/ID-No.: -

Label: - Packing group:

Remark:

Not a hazardous material with respect to these transportation regulations.

Postage:

15. Regulatory information

Classification:

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

A safety evaluation was conducted:

Hazardous component(s) for labelling:

Special labelling of particular preparations:

None

EU-Regulations:

Data concerning the Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL):

None

Data concerning the decree (EG) No. 648/2004 (Detergents Regulations)

None

National regulations:

Moreover, national legislation has to be observed!

Restrictions of use:

None

Statutory order on hazardous incidents:

None

Storage class:

12 Non-flammable liquids

Water Hazard Class:

1 Slightly water polluting substance

Technical Instructions on Air Quality (TI-Air):

None

Further regulations, limitations and legal requirements:

None

16. Other information

Wording of the H and R-phrases under paragraph 3 Regulation (EC) No 1272/2008

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Directive 67/548/EEC

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Training advices:

None

Recommended restrictions of use:

refer to chapter 1.

Further remarks:

The information in this safety data sheet is correct to the best of our knowledge at the time of printing. 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.

There is no liability or warranty, expressed or implied, assumed regarding merchantability, operational capability for a particular purpose, use, or any other kind hereafter with respect to the information or the product to which the information relates.

Changes:

None

Data sources:

Data arise from reference works and literature.