



# 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** and  
**EN 15040** used for treatment  
of water intended for human  
consumption

Version: 4      Language: EN      Revision date: 01.06.2015  
Labelling pursuant to CLP regulation

## 1. Identification of the substance or preparation

### RPI-4500A

**REACH registration number:** -      Downstream User

**Use of the substance / preparation:**      Reverse osmosis antiscalant

#### Company/undertaking identification

**Manufacturer & Supplier:**

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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 not 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 feedingstuffs.  
20/21 When using do not eat, drink or smoke.  
26 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 of sodium salts of a polyacrylic acid and a phosphonate.

**Contains components listed below:**

Polyacrylate, Sodium salt

Content: 2 - 10 Wt-%

EINECS-No.: -

CAS-No.: -

Classification: -

Phosphonate, Sodium salt

Content: 10 - 40 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

<b>General information:</b>	No special measures are necessary.
<b>After inhalation:</b>	Provide fresh air. Seek medical attention if problems persist.
<b>After skin contact:</b>	After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.
<b>After eye contact:</b>	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.
<b>After ingestion:</b>	Rinse mouth immediately and drink large quantities of water. Do not induce vomiting. Seek medical attention if problems persist.
<b>Self-protection of the first aider:</b>	No special measures are necessary.
<b>Information to physician:</b>	
<b>Symptoms:</b>	No symptoms known up to now.
<b>Nature of Hazard:</b>	none
<b>Treatment:</b>	Treat symptomatically.

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#### 5. Fire fighting measures

<b>General information:</b>	Extinguishing materials should be selected according to the surrounding area. The product itself is not combustible.
<b>Suitable extinguishing media:</b>	Carbon dioxide (CO <sub>2</sub> ). Dry extinguishing powder. Water fog. Foam.
<b>Extinguishing media which must not be used for safety reasons:</b>	High power water jet.
<b>Special exposure hazards arising from the substance itself, combustion products, resulting gases:</b>	Carbon dioxide. Carbon monoxide. Nitrogen oxides (NO <sub>x</sub> ). Phosphorus oxides. Pyrolysis products, toxic.
<b>Special protective equipment for fire-fighters:</b>	In case of fire: Wear self-contained breathing apparatus. Protective clothing.
<b>Additional information:</b>	Contaminated fire-fighting water must be collected separately.

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#### 6. Accidental release measures

<b>Personal precautions:</b>	See protective measures under point 7 and 8.
<b>Environmental precautions:</b>	No special environmental protection measures are necessary.
<b>Methods for cleaning up:</b>	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.
<b>Additional information:</b>	none

## 7. Handling and storage

### Handling

**Information for safe handling:**

The following must be prevented: metals.

**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.

**Information about storage in one common storage facility:**

Do not store together with: Food and fodder

**Further information concerning storage conditions:**

none

**Storage class:** 12

**Specific use(s):**

Observe instructions for use.

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## 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

<b>Form:</b>	Liquid
<b>Colour:</b>	Yellow
<b>Odour:</b>	Characteristic
<b>pH:</b>	4,0 - 4,5
<b>Melting point / melting range:</b>	-10 °C
<b>Boiling point / boiling range:</b>	100 - 105 °C
<b>Flash point:</b>	100 °C
<b>Flammability:</b>	No data available
<b>Explosion hazard:</b>	No data available
<b>Lower explosion limit:</b>	No data available
<b>Upper explosion level:</b>	No data available
<b>Ignition temperature (AIT):</b>	No data available
<b>Oxidizing properties:</b>	No data available
<b>Vapour pressure:</b>	No data available
<b>Relative density:</b>	1,14 - 1,17 g/cm <sup>3</sup>
<b>Solubility in water: (g/l):</b>	unlimited
<b>Fat solubility: (g/l):</b>	No data available
<b>Solubility in organic solvent:</b>	No data available
<b>Partition coefficient (n-octanol / water) (log P O/W):</b>	No data available
<b>Viscosity:</b>	40 mPas (20 °C)
<b>Relative vapour density at 20°C:</b>	No data available
<b>Speed of vaporization/evaporation rate:</b>	No data available
<b>Solvent separation test (%):</b>	No data available
<b>Solvent content (%):</b>	No data available
<b>Bulk density:</b>	not applicable

**Additional information:**

None

## 10. Stability and reactivity

**Conditions to avoid:**

none

**Materials to avoid:**

none

**Dangerous reactions:**

Reacts with : metal.

**Hazardous decomposition products:**

Carbon dioxide. Carbon monoxide. Nitrogen oxides (NOx). Phosphorus oxides. 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, oral (LD50): Rat > 5000 mg/kg

Acute toxicity, dermal (LD50): Rabbit > 5000 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): *Oncorhynchus mykiss* (Rainbow Trout) > 290 mg/l (96 h)

Bacterial toxicity (EC0): n.a.

**Mobility:**

There are no data available on the mixture itself.

**Persistence and Biodegradation:**

Technically correct releases of minimal concentrations to adapted biological sewage treatment facility, will not disturb the biodegradability of activated sludge.

**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.

**Further ecological information:**

none

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### 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.

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### 14. Transport information

**Overland transport (ADR/RID)****Technical name:**

ROPUR RPI-4500A

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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-4500A

-

**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-4500A

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**UN/ID-No.:** -**Label:** - **Packing group:** -**Remark:** Not a hazardous material with respect to these transportation regulations.**Postage:**

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**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.

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