



Certified by
NSF International

For use in drinking water
treatment

Comply with EU regulations
CEN/TS 164, EN 15039 and
EN 15040 used for treatment
of water intended for human
consumption

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

1. Identification of the substance or preparation

RPI-4900

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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Emergency telephone:

This number is serviced during office hours

.

Telephone: Your local Emergency Services

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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 Pictogram,
No Signal Word
No Precautionary Statement

Signal word: -

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: 42/43 - May cause sensitization by inhalation and skin contact.

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 salt of a phosphonate.

Components listed below:

Phosphonate, Sodium salt

Content: 20 -50 Wt-%

EINECS-No.: 229-146-5

CAS-No.: 6419-19-8

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.
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 (CO ₂). 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. Nitrogen oxides (NO _x). Phosphorus oxides. 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:

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: 25 °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.

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:	yellow
Odour:	characteristic
pH (1%):	10,0 – 10.7
Melting point / melting range:	-15 °C
Boiling point / boiling range:	105 °C
Flash point:	100 °C
Flammability:	No data available
Explosion hazard:	No data available
Lower explosion limit:	No data available
Upper explosion level:	No data available
Ignition temperature (AIT):	No data available
Oxidizing properties:	No data available
Vapour pressure:	No data available
Relative density:	1,34 - 1,37 g/cm ³
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:	< 20 mPas (20 °C)
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
Package density:	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.

LD/LC50 values that are relevant for classification:

Acute toxicity, oral (LD50): Rat > 17800 mg/kg

Acute toxicity, dermal (LD50): Rabbit 15800 mg/kg

Primary Irritant Effect**Irritation effect on the skin:**

Repeated or prolonged contact may cause slight irritation to skin not resulting in classification.

Irritation effect on the eye:

May cause slight irritations.

Sensitization:

Based on available data, the classification criteria are not met. Data based on animal data and human exposure reports.

Effect after repeated or prolonged exposure:

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

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

Based on available data, the classification criteria are not met. Not classified either for mutagenicity or genotoxicity. The RPI4900 Phosphonate salt did not induce chromosome damage either in vitro or in vivo. Additionally, no structural alerts for genotoxic activity was found. Not toxic for reproduction based on rats three generation study.

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:

Water hazard class 1 (German Regulation).

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or un-neutralized.

Ecotoxicity:

Acute fish toxicity (LC50): *Oncorhynchus mykiss* (Rainbow Trout) > 330 mg/l (96 h)

Not harmful to aquatic organisms (short term and long term exposure). RPI-4900 can lead to growth inhibition in algae, but this effect is a consequence of the substance's complexation with essential nutrients and not of true toxicity.

Mobility:

No further relevant information available.

Persistence and Biodegradation:

Releases of minimal concentrations (diluted) to adapted biological sewage treatment facility will not disturb the biodegradability of activated sludge. Easily biodegradable. Partially photodegradable over short time period (according to the criteria of the OECD).

Bioaccumulative potential:

Not potentially bioaccumulative (Log Kow = -3.53). No further relevant information available.

Results of PBT assessment:

Not applicable.

Other harmful effects:

No further relevant information available.

Further ecological information:

No further relevant information available.

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:

Disposal must be made according to official regulations

14. Transport information

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

ROPUR SCALE INHIBITOR RPI-4900

-

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 SCALE INHIBITOR RPI-4900

-

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 SCALE INHIBITOR RPI-4900
-

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 Chemical Safety Assessment has been carried out](#)

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 (when released in the concentrated form and rapidly).

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**

-

Directive 67/548/EEC

-

Training instructions:

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.
