

VONTRON MEMBRANE TECHNOLOGY CO, LTD.  
SOUTH HUITON HI-TECH ZONE, NO.126 GAOXIN ROAD, WUDANG DISTRICT, GUIYANG, GUIZHOU, CHINA,  
550018

SGS Job No. : CQ15163310EC  
Sample Name : Reverse osmosis membrane element  
End Uses : Filtration  
Composition/Ingredient of sample (as per client submission) : See *Section 3 Composition/information on ingredients* on the SDS report  
Job Receiving Date : 19 Mar 2014  
Last Information Date : 10 Apr 2014  
SDS Preparation Period : 19 Mar 2014 – 16 Apr 2014

Service Requested : Safety Data Sheet (SDS) for the sample with submitted composition.

Summary : As per request, the contents and formats of the SDS are prepared in accordance with European Commission Directives 67/548/EEC, 1999/45/EC, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and Regulation (EU) No 453/2010, and is provided per attached.

**Remark:**

The SDS is prepared based on the information provided by client.

\* This sample is likely to be classified as article with substances not intended to be released and is out of scope of a SDS as set out in Regulation (EC) No 1907/2006. This SDS is generated for client's reference only.

Signed for and on behalf of  
SGS-CSTC Ltd.



Oscar Wang  
Approved Signatory



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

198 Kezhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgsgroup.com.cn

中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075113 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

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

- **Product identifier**
- **Trade name:** Reverse osmosis membrane element
- **Registration number:** *Not available*
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation:** *Filtration*
  
- **Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:** VONTRON MEMBRANE TECHNOLOGY CO, LTD.
- **Full address:**  
SOUTH HUITON HI-TECH ZONE, NO.126 GAOXIN ROAD, WUDANG DISTRICT, GUIYANG, GUIZHOU, CHINA, 550018
- **Phone number:** 0851-6270379
- **FAX:** 0851-6270385
- **Only Representative / other EU contact point:**  
Polígono Industrial VII - Avenida Picassent, 24 46460 • Silla (Valencia)  
Lorena Tel: 961 212 472; Fax: 961 213 10
- **Further information obtainable from:** VONTRON MEMBRANE TECHNOLOGY CO, LTD.
- **Emergency telephone number:**  
TangTao 0851-6270379
  
- **SPAIN**  
National Institute of Toxicology and Forensic Sciences  
Toxicology Information Service  
Tel: +34 91 562 04 20
- **Email:** tangtao@vontron.com.cn
- **Reference Number:** CQ15163310EC, CANEC1403462801
- **Remark:**  
\* This sample is likely to be classified as article with substances not intended to be released and is out of scope of a SDS as set out in Regulation (EC) No 1907/2006. This SDS is generated for client's reference only.

### SECTION 2: Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R40: Limited evidence of a carcinogenic effect.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of Directive 67/548/EEC, 1999/45/EC and Regulation (EC) No. 1272/2008.

- **Classification system:**

The classification is according to the latest edition of the Directive 67/548/EEC, 1999/45/EC and Regulation (EC) No. 1272/2008, and extended by company and literature data.

(Contd. on page 2)

# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

Trade name: Reverse osmosis membrane element

(Contd. of page 1)

- **Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Warning

- **Hazard-determining components of labelling:**

Fibrous Glass

- **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

- **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:**

Mixture of the substances listed below with nonhazardous additions.

For the wording of listed risk phrases refer to section 16.

- **Dangerous components:**

CAS: 65997-17-3 EINECS: 266-046-0	Fibrous Glass ☒ Xn R40; ☒ Xi R36/37/38 ☠ Carc. 2, H351; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10,05%
CAS: 9003-56-9	poly (acrylonitrile-co-butadiene-co-styrene) ☒ Xn R22; ☒ Xi R36/37/38 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	8,97%

- **Non-dangerous components:**

25038-59-9	Polyethylene terephthalate	42,61%
9003-07-0	Polypropylene	11,2%
9009-54-5	Polyurethane foam	10,2%
	Epoxy resin	8,5%

(Contd. on page 3)

# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

**Trade name: Reverse osmosis membrane element**

(Contd. of page 2)

25135-51-7	Polysulfone	7,4%
24993-04-2	Poly(hexamethylene adipamide-co-caprolactam)	0,8%
	EPDM	0,27%

**· Remark:**

Epoxy resin, EPDM

Note: Classification information of Epoxy resin, EPDM are provided by the formulation owner and/or the chemical supplier(s).

poly (acrylonitrile-co-butadiene-co-styrene) (CAS: 9003-56-9)

Note: ABS

Polyethylene terephthalate (CAS: 25038-59-9)

Note: PET

Polypropylene (CAS: 9003-07-0)

Note: PP

Polysulfone (CAS: 25135-51-7)

Note: PS

Poly(hexamethylene adipamide-co-caprolactam) (CAS: 24993-04-2)

Note: PA

### SECTION 4: First aid measures

**· Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

**· Information for doctor**

- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

### SECTION 5: Firefighting measures

**· Extinguishing media**

**· Suitable extinguishing agents:**

CO<sub>2</sub> powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**· Special hazards arising from the substance or mixture:** No further relevant information available.

**· Advice for firefighters**

**· Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

**· Personal precautions, protective equipment and emergency procedures:** Not required.

**· Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**· Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

**· Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

**Trade name: Reverse osmosis membrane element**

(Contd. of page 3)

See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **Handling**
- **Precautions for safe handling:** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **DNELs:** Not available
- **PNECs:** Not available
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure**
- **Personal protective equipment**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves:**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material:**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

EU

(Contd. on page 5)

# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

Trade name: Reverse osmosis membrane element

(Contd. of page 4)

### SECTION 9: Physical and chemical properties

· <b>Information on basic physical and chemical properties</b>	
· <b>General information</b>	
· <b>Appearance</b>	
· <b>Form:</b>	Cylinder
· <b>Colour:</b>	Flaxen
· <b>Odour:</b>	Flavourless
· <b>Odour threshold:</b>	Not available
· <b>pH-value:</b>	Not available
· <b>Change in condition</b>	
· <b>Melting point/Melting range:</b>	Not available
· <b>Boiling point/Boiling range:</b>	Not available
· <b>Freezing point:</b>	Not available
· <b>Flash point:</b>	Not available
· <b>Flammability (solid, gaseous):</b>	Not available
· <b>Auto-Ignition temperature:</b>	Not available
· <b>Decomposition temperature:</b>	Not available
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits</b>	
· <b>Lower:</b>	Not available
· <b>Upper:</b>	Not available
· <b>Oxidizing properties:</b>	Not available
· <b>Vapour pressure:</b>	Not available
· <b>Density:</b>	Not available
· <b>Relative density:</b>	Not available
· <b>Vapour density:</b>	Not available
· <b>Evaporation rate:</b>	Not available
· <b>Solubility in / Miscibility with water:</b>	Not available
· <b>Partition coefficient (n-octanol/water):</b>	Not available
· <b>Viscosity</b>	
· <b>Dynamic:</b>	Not available
· <b>Kinematic:</b>	Not available
· <b>Other information:</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **Reactivity:** Data not available
- **Chemical stability:** Data not available
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

EU

(Contd. on page 6)

# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

Trade name: Reverse osmosis membrane element

(Contd. of page 5)

### SECTION 11: Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **LD/LC50 values relevant for classification:** Not available
- **Primary irritant effect**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful
- **Toxicokinetics, metabolism and distribution:** No further relevant information available
- **Acute effects (acute toxicity, irritation and corrosivity):** No further relevant information available
- **Repeated dose toxicity:** No further relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**  
Carc. 2

### SECTION 12: Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behaviour in environmental systems:** No further relevant information available
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

### SECTION 13: Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |                                  |                |
|----------------------------------|----------------|
| · <b>UN-Number</b>               |                |
| · <b>ADR, IMDG, IATA</b>         | Not applicable |
| · <b>UN proper shipping name</b> |                |
| · <b>ADR, IMDG, IATA</b>         | Not applicable |

(Contd. on page 7)

# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

Trade name: Reverse osmosis membrane element

(Contd. of page 6)

· <b>Transport hazard class(es)</b>	
· <b>ADR, IMDG, IATA</b>	
· <b>Class</b>	Not applicable
· <b>Label</b>	-

· <b>Packing group</b>	
· <b>ADR, IMDG, IATA</b>	Not applicable

· <b>Environmental hazards</b>	
· <b>Marine pollutant:</b>	No

· <b>Special precautions for user:</b>	Not applicable.
· <b>Danger code (Kemler):</b>	-

· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>	Not applicable.
---	-----------------

### SECTION 15: Regulatory information

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

· **MAK(German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **National regulations**

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **Other regulations, limitations and prohibitive regulations**

· **SVHC Candidate List of REACH Regulation Annex XIV Authorisation (16/12/2013)**

None of the ingredients is listed

· **REACH Regulation Annex XVII Restriction (27/3/2014)** None of the ingredients is listed

· **REACH Regulation Annex XIV Authorisation List (17/4/2013)** None of the ingredients is listed

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

· **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R40 Limited evidence of a carcinogenic effect.

\*\*\*\*\*

The contents and format of this SDS are in accordance with REGULATION (EC) No. 1272/2008, (EC) No. 1907/2006, REGULATION (EU) No. 453/2010 and EU Commission Directive 1999/45/EC, 67/548/EEC.

#### DISCLAIMER OF LIABILITY

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in anyway connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Remark:

(Contd. on page 8)



# Safety Data Sheet

## 1907/2006/EC, 1272/2008/EC

Printing date 16.04.2014

Revision: 16.04.2014

**Trade name: Reverse osmosis membrane element**

(Contd. of page 7)

\* This sample is likely to be classified as article with substances not intended to be released and is out of scope of a SDS as set out in Regulation (EC) No 1907/2006. This SDS is generated for client's reference only.

\*\*\*\*\*

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*DNEL: Derived No-Effect Level (REACH)*

*PNEC: Predicted No-Effect Concentration (REACH)*

*Acute Tox. 4: Acute toxicity, Hazard Category 4*

*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*

*Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2*

*Carc. 2: Carcinogenicity, Hazard Category 2*

*STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3*

\*\*\*\*\*

*End of document*

EU