

Safety Data Sheet dated 25/9/2012, version 1



## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

Mixture identification:

Trade name: **EXPOSAN RB1**

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

High concentration, broad spectrum , non foaming algaecide with lightening effect.

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

Company:

BARCHEMICALS SRL

VIA S.ALLENDE 14

CASTELNUOVO RANGONE (MO)

ITALY

PHONE. +39 059/536502

FAX. +39 059/536742

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it


### 1.4. Emergency telephone number


Barani Dr.Corrado - MOBILE PHONE. +39 335/6109383

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

 Warning, Aquatic Acute 1, Very toxic to aquatic life.

 Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

**Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:**

Properties / Symbols:

N Dangerous for the environment

R Phrases:

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

EC regulation criteria 1272/2008 (CLP)

Symbols:



Warning

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## *Solution for Water Treatment*

### Hazard statements:

- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

### Precautionary statements:

- P273 Avoid release to the environment.
- P391 Collect spillage.
- P501 Dispose of contents/container in accordance with applicable regulations.

### Special Provisions:

None

### **Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:**

#### Symbols:

N Dangerous for the environment

#### R Phrases:

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### S Phrases:

- S56 Dispose of this material and its container to hazardous or special waste collection point.
- S57 Use appropriate container to avoid environmental contamination.
- S60 This material and its container must be disposed of as hazardous waste.

### **2.3. Other hazards**

vPvB Substances: None - PBT Substances: None

#### Other Hazards:

No other hazards

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## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

### **3.1. Substances**

N.A.

### **3.2. Mixtures**

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

5% - 20% Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane

CAS: 25988-97-0

Xn,N; R22-50/53

! 3.1/4/Oral Acute Tox. 4 H302

! 4.1/A1 Aquatic Acute 1 H400

! 4.1/C1 Aquatic Chronic 1 H410

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## **4. FIRST AID MEASURES**

### **4.1. Description of first aid measures**

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

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

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

### **4.2. Most important symptoms and effects, both acute and delayed**

None

### **4.3. Indication of any immediate medical attention and special treatment needed**

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## *Solution for Water Treatment*

Treatment:  
None

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### 5. FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

#### 6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

#### 6.4. Reference to other sections

See also section 8 and 13

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### 7. HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage at room temperature and away from direct sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

#### 7.3. Specific end use(s)

None in particular

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

None.

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DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

#### **8.2. Exposure controls**

Eye protection:

Basket eye glasses.

Protection for skin:

Full protection suit.

Protection for hands:

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

|   |              |
|---|--------------|
| Appearance and colour:                        | Amber liquid |
| Odour:  | Odorless     |
| Odour threshold:                              | Not Relevant |
| pH:   | 6.5 - 7.5    |
| Melting point / freezing point:               | Not Relevant |
| Initial boiling point and boiling range:      | Not Relevant |
| Solid/gas flammability:                       | Not Relevant |
| Upper/lower flammability or explosive limits: | Not Relevant |
| Vapour density:                               | Not Relevant |
| Flash point:                                  | Not Relevant |
| Evaporation rate:                             | Not Relevant |
| Vapour pressure:                              | Not Relevant |
| Relative density:                             | 1.04 Kg/l    |
| Solubility in water:                          | Complete     |
| Lipid solubility:                             | Not Relevant |
| Partition coefficient (n-octanol/water):      | Not Relevant |
| Auto-ignition temperature:                    | Not Relevant |
| Decomposition temperature:                    | Not Relevant |
| Viscosity:                                    | Not Relevant |
| Explosive properties:                         | Not Relevant |
| Oxidizing properties:                         | Not Relevant |

### **9.2. Other information**

|                                      |              |
|--------------------------------------|--------------|
| Miscibility:                         | Not Relevant |
| Fat Solubility:                      | Not Relevant |
| Conductivity:                        | Not Relevant |
| Substance Groups relevant properties | Not Relevant |

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## **10. STABILITY AND REACTIVITY**

### **10.1. Reactivity**

Stable under normal conditions

### **10.2. Chemical stability**

Stable under normal conditions

### **10.3. Possibility of hazardous reactions**

None

### **10.4. Conditions to avoid**

Stable under normal conditions.

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**10.5. Incompatible materials**

None in particular.

**10.6. Hazardous decomposition products**

None.

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**11. TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane - CAS: 25988-97-0

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1672 mg/kg

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

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**12. ECOLOGICAL INFORMATION**

**12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane - CAS: 25988-97-0

Test: EC50 - Species: Scene - Duration h: 72 - mg/l: 0.09

Test: EC50 - Species: Daphnia - Duration h: 48 - mg/l: 0.14

Test: LC50 - Species: Fish - Duration h: 96 - mg/l: 0.077

**12.2. Persistence and degradability**

N.A.

**12.3. Bioaccumulative potential**

N.A.

**12.4. Mobility in soil**

N.A.

**12.5. Results of PBT and vPvB assessment**

vPvB Substances: None - PBT Substances: None

**12.6. Other adverse effects**

None

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**13. DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

Recover if possible. In so doing, comply with the local and national regulations currently in force.

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## 14. TRANSPORT INFORMATION



### 14.1. UN number

ADR-UN Number: 3082  
IATA-UN Number: 3082  
IMDG-UN Number: 3082

### 14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S  
(Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane)  
IATA-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S  
(Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane)  
IMDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S  
(Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane)

### 14.3. Transport hazard class(es)

ADR-Class: 9  
ADR - Hazard identification number: 90  
IATA-Class: 9  
IATA-Label: Miscellaneous  
IMDG-Class: 9

### 14.4. Packing Group

ADR-Packing Group: III  
IATA-Packing group: III  
IMDG-Packing group: III

### 14.5. Environmental hazards

ADR-Environmental Pollutant: Yes  
IMDG-Marine pollutant: Marine Pollutant

### 14.6. Special Precautions for User

ADR-Tunnel Restriction Code: (E)  
IATA-Passenger Aircraft: 964  
IATA-Cargo Aircraft: 964  
IATA-S.P.: A97-A158  
IATA-ERG: 9L  
IMDG-EmS: F-A , S-F  
IMDG-Storage category: A

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

N.A.

## 15. REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n. 790/2009 (1° ATP CLP), Regulation (EU) n. 453/2010 (Annex I).

Where applicable, refer to the following regulatory provisions :

Regulation (EC) nr 648/2004 (Detergents).

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

1999/13/EC (VOC directive)

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## 15.2. Chemical Safety Assessment

No

## 16. OTHER INFORMATION

Product for professional use

Full text of phrases referred to in Section 3:

R22 Harmful if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

|             |  |
|-------------|--|
| ADR:        | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
| CAS:        | Chemical Abstracts Service (division of the American Chemical Society).              |
| CLP:        | Classification, Labeling, Packaging.   |
| DNEL:       | Derived No Effect Level.   |
| EINECS:     | European Inventory of Existing Commercial Chemical Substances.                       |
| GefStoffVO: | Ordinance on Hazardous Substances, Germany.  |
| GHS:        | Globally Harmonized System of Classification and Labeling of Chemicals.              |
| IATA:       | International Air Transport Association.   |
| IATA-DGR:   | Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  |
| ICAO:       | International Civil Aviation Organization.   |
| ICAO-TI:    | Technical Instructions by the "International Civil Aviation Organization" (ICAO).    |
| IMDG:       | International Maritime Code for Dangerous Goods.                                     |
| INCI:       | International Nomenclature of Cosmetic Ingredients.                                  |
| KSt:        | Explosion coefficient.   |
| LC50:       | Lethal concentration, for 50 percent of test population.                             |
| LD50:       | Lethal dose, for 50 percent of test population.                                      |
| LTE:        | Long-term exposure.  |
| PNEC:       | Predicted No Effect Concentration.   |
| RID:        | Regulation Concerning the International Transport of Dangerous Goods by Rail.        |
| STE:        | Short-term exposure.   |
| STEL:       | Short Term Exposure limit.   |

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## *Solution for Water Treatment*

|         |  |
|---------|--|
| STOT:   | Specific Target Organ Toxicity.  |
| TLV:    | Threshold Limiting Value.  |
| TWATLV: | Threshold Limit Value for the Time Weighted Average 8 hour day.<br>(ACGIH Standard). |
| WGK:    | German Water Hazard Class.   |

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