



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

1.1. Product Identifier

Mixture identification:

Trade name: **EXPOSAN C91**

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

High concentration algaecide. Particularly suitable for summer swimming pools. No foaming. Brighteners and whitening 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)

 Aquatic Chronic 2, 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:

R51/53 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:



Hazard statements:

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P102 Keep out of reach of children.

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Solution for Water Treatment

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:

R51/53 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

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:

0.5% - 1% 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

0.1% - 0.25% 2,2'-iminodiethanol; diethanolamine

Index number: 603-071-00-1, CAS: 111-42-2, EC: 203-868-0

Xn,Xi; R22-38-41-48/22

⚠ 3.9/2 STOT RE 2 H373

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.3/1 Eye Dam. 1 H318

⚠ 3.1/4/Oral Acute Tox. 4 H302

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:

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After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

In case of Ingestion:

Rinse mouth thoroughly and drink plenty of water.

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

Treatment:

None

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

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.

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.

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

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

Keep away from food, drink and feed.

Incompatible materials:

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Solution for Water Treatment

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

TLV TWA: 0,47 ppm - 2 mg/m³ Skin

TLV STEL: Skin

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:

Rubber gloves.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance and colour:	Blu liquid
Odour:	Odorless
Odour threshold:	N.A.
pH:	6 - 7
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	1,01 Kg/l
Solubility in water:	Complete
Lipid solubility:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.

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Substance Groups relevant properties N.A.

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.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

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

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2 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.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

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

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

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

Test: EC50 - Species: Daphnia - Duration h: 48 - mg/l: 100

Test: EC50 - Species: Algae - Duration h: 96 - mg/l: 10

Test: LC50 - Species: Fish - Duration h: 96 - mg/l: 100

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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

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

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-Enviromental 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

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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).

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.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R48/22 Harmful: danger of serious damage to health by prolonged exposure 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.
H373 May cause damage to organs through prolonged or repeated exposure.
H315 Causes skin irritation.
H318 Causes serious eye damage.

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.

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

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