
SAFETY DATA SHEET

1. Identification of the substance or preparation and of the company/undertaking

1.1 Product identifier

- Product Name: CONDENSATE CONTROL

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/preparation: Water treatment

1.3 Details of the supplier of the safety data sheet

Company:

Unimarine Services Inc.
60 Market Square,
PO Box 364, Belize City

Contact your nearest Unimarine sales office

Representative office in Greece:

Email: info@unimarine.gr

Tel: +30 210 9957279

2. Hazards identification

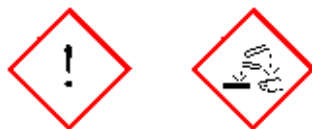
2.1 Classification of the substance or mixture

- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Refer to current The Dangerous Substances Directive (67/548/EEC)
- Symbols: C
- Causes burns (R34)
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- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Symbols: GHS07, GHS05
- Signal Word: Danger
- Acute Tox. 4

2. Hazards identification

- Skin Corr. 1B
- STOT SE 3
- Harmful if swallowed (H302).
- Harmful in contact with skin (H312).
- Harmful if inhaled (H332).
- Causes severe skin burns and eye damage (H314).
- May cause respiratory irritation (H335).

2.2 Label elements



- Signal Word: Danger
- Acute Tox. 4
- Skin Corr. 1B
- STOT SE 3
-
- Contains:
- 2-aminoethanol
- 2-diethylaminoethanol
-
- Hazard phrases
 - Harmful if swallowed (H302).
 - Harmful if inhaled (H332).
 - Harmful in contact with skin (H312).
 - Causes severe skin burns and eye damage (H314).
 - May cause respiratory irritation (H335).
- Precautionary Phrases
 - Wear protective gloves/protective clothing/eye protection/face protection (P280).
 - Avoid breathing dust/fume/gas/mist/vapours/spray (P261).
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
 - If eye irritation persists: Get medical advice/attention (P337+P313).
 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician (P301+P310).

2.3 Other hazards

- Not applicable
 - Not a PBT according to REACH Annex XIII
 - Odour: Amine odour
 - Appearance: Liquid, pale yellow, miscible with water
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3. Composition/information on ingredients

3.1 Mixtures

- 2-Aminoethanol
 - Concentration: 5-10%
 - CAS Number: 141-43-5
 - EC Number: 205-483-3
 - Symbols: C, GHS07, GHS05
 - R/H Phrases: R20/21/22, R34 - H302, H312, H314, H335
 - Categories: Acute Tox. 4, Skin Corr. 1B, STOT SE 3
 - 2-Diethylaminoethanol
 - Concentration: 1-5%
 - CAS Number: 100-37-8
 - EC Number: 202-845-2
 - Symbols: C, GHS02, GHS07, GHS05
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3. Composition/information on ingredients

R/H Phrases: R10, R20/21/22, R34 - H226, H302, H312, H332, H314
Categories: Flam. Liq. 3, Acute Tox. 4, Skin Corr. 1B

4. First aid measures

4.1 Description of first aid measures

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353).
- When in doubt or symptoms persist, seek medical attention
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- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
- Get immediate medical advice/attention (P315).
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- IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Give plenty of water to drink
- Never make an unconscious person vomit or drink fluids
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- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).
- When in doubt or symptoms persist, seek medical attention

4.2 Most important symptoms and effects, both acute and delayed

- The ingestion of significant quantities may cause gastro-intestinal disturbances
- Mildly irritating to respiratory system
- Can cause damage to the eyes, skin and mucous membranes

4.3 Indication of any immediate medical attention and special treatment needed

- No information available
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5. Fire-fighting measures

5.1 Extinguishing media

- In case of fire: use water, alcohol resistant foam or dry agent for extinction (P370+P378)

5.2 Special hazards arising from the substance or mixture

- Smoke from fires is toxic. Take precautions to protect personnel from exposure

5.3 Advice for firefighters

- Wear chemical protection suit and positive-pressure breathing apparatus
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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8

6.2 Environmental Precautions

- Avoid release to the environment (P273).
- Do not flush spilt material into any public water system

6.3 Methods and material for containment and cleaning up

- Absorb spillage in inert material and shovel up
 - Ventilate the area and wash spill site after material pick-up is complete
 - Place in sealable container
 - Seal containers and label them
 - Remove contaminated material to safe location for subsequent disposal
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6. Accidental release measures

6.4 Reference to other sections

- See Section 13

7. Handling and storage

7.1 Precautions for safe handling

- Eyewash bottles should be available
- Do not get in eyes, on skin, or on clothing (P262).
- See Section 8
- Wear protective clothing as per section 8

7.2 Conditions for safe storage, including any incompatibilities

- Store in a dry place. Store in a closed container (P402+P404).
- Store in a closed container (P404).

7.3 Specific end use(s)

- Contact supplier for further information

8. Exposure controls/personal protection

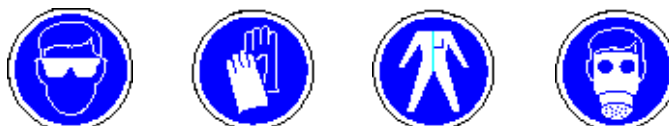
8.1 Control parameters

- 2-Aminoethanol
TLV (TWA) 2.5 mg/m³ ()
- 2-Diethylaminoethanol
TLV (TWA) 50 mg/m³ ()

8.2 Exposure controls

- Engineering controls should be provided which maintain airborne concentrations as low as practicable

8.3 Occupational exposure controls



- Wear suitable protective clothing, including eye/face protection and gloves (plastic or rubber are recommended)
- 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.
- Respiratory protection may be required under exceptional circumstances when excessive air contamination exists
- Wear suitable respiratory protection. Gas cartridge (organic substances).

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Odour: Amine odour
- Appearance: Liquid, pale yellow, soluble in water
- pH 11.5 - 12.5 at 100 % concentration
- Boiling point ~ 100 °C to 760 °C
- Completely soluble in water
- Density 0.99 - 1.101 g/cm³ at 20 deg C
- Flash point > 62 deg C (CC)

9.2 Other information

10. Stability and reactivity

10.1 Reactivity

- This article is considered stable under normal conditions

10.2 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.3 Incompatible materials

- Incompatible with acid

10.4 Conditions to avoid

- Avoid overheating

10.5 Hazardous Decomposition Products

- Decomposition products may include nitrogen and carbon oxides
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11. Toxicological information

11.1 Information on toxicological effects

- LD50 (oral, rat) (2-Aminoethanol) 1515 mg/kg
- LD50 (skin, rat) (2-aminoethanol) 4Hrs 1025 mg/kg
- LD50 (oral, rat) (2-diethylaminoethanol) 1320 mg/kg
- LD50 (skin, rat) (2-diethylaminoethanol) 1100 mg/kg

11.2 Contact with eyes

- Prolonged skin or eye contact may cause chemical burns

11.3 Contact with skin

- Prolonged skin or eye contact may cause chemical burns

11.4 Ingestion

- The ingestion of significant quantities may cause gastro-intestinal disturbances
- The ingestion of significant quantities may cause damage to mucous membranes

11.5 Inhalation

- In cases of severe exposure, irritation may develop
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12. Ecological information

12.1 Toxicity

- LC50 (fish) (2-aminoethanol) 329 mg/l (96 hr)
- LC50 (fish) (2-diethylaminoethanol) 147 mg/l (96 hr)
- Biodegradability. OECD-test. 28 days >60 % (2-diethylaminoethanol)
- Biodegradability. OECD-test. 28 days >60 % ((2-aminoethanol))

12.2 Persistence and degradability

- The components in this product are readily biodegradable.

12.3 Bioaccumulation Potential

- Bioaccumulation of the components in this product is insignificant.

12.4 Mobility in soil

- Completely soluble in water

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII

12.6 Other Adverse Effects

- Not applicable
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13. Disposal considerations

13.1 Waste treatment methods

- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Disposal should be in accordance with local, state or national legislation

13.2 Classification

- EU Waste class: 07.07.99
 - This material and/or its container must be disposed of as hazardous waste
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14. Transport information



14.1 UN

- UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- Hazard Class: 8
- Packing Group: III

14.2 Environmental hazards

- Presents little or no hazard to the environment

14.3 Special precautions for user

- No special precautions are required for this product

14.4 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

- Not applicable

14.5 Road/Rail (ADR/RID)

- ADR UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- ADR Hazard Class: 8
- ADR subrisk: -
- ADR Packing Group: III
- ADR Flashpoint: -

14.6 Sea (IMDG)

- IMDG UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- IMDG Hazard Class: 8
- IMDG subrisk: -
- IMDG Pack Group.: III
- IMDG EmS: F-A, S-B
- IMDG Flashpoint: -

14.7 Air (ICAO/IATA)

- ICAO Un No.: UN2735
 - Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
 - ICAO Packing Group: III
 - ICAO Hazard Class: 8
 - ICAO subrisk: -
 - ICAO Flashpoint: -
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14. Transport information

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: UN2735
 - DOT Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
 - DOT Labels:
 - Product RQ (lbs): -
 - Hazardous Material: 2-aminoethanol, 2-diethylaminoethanol
 - Hazard Class: 8
 - DOT subrisk: -
 - DOT Flashpoint: -
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15. Regulatory information

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

- This Safety Data Sheet has been prepared in accordance with article 31 and annex II in REACH and Directive 453/2010/EU.
- This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)
- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
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- Norwegian Productregistration no: 17079
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- This product is approved by the Norwegian Health Authorities and listed in Approved/evaluated chemicals for use in potable water supply onshore and offshore.

15.2 Chemical Safety Assessment

- None
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16. Other information

The information contained herein relates only to the specific material identified. Unimarine Services Inc. Believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, express or implied, is made as to the accuracy, reliability, or completeness of the information. Unimarine Services Inc. urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application