UNIMARINE SERVICES INC

SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: LIQUIVAP
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Evaporator treatment
 - 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

1.4 Emergency Telephone Number

Emergency Telephone: Only to be used in case of incident

Tel: 00357 25 662068

2. Hazards identification

- 2.1 Classification of the substance or mixture
 - Not Classified
- 2.2 Label elements
 - None
 - Hazard phrases Not applicable
 - Precautionary Phrases
 Not applicable

2. Hazards identification

2.3 Other hazards

- Odour: Odourless
- Appearance: Liquid, pale yellow, soluble in water
- Contact with eyes: In cases of severe exposure, irritation may develop
- Contact with skin: In cases of severe exposure, irritation may develop
- Inhalation: Vapours or aerosols may cause irritation of eyes, nose and respiratory tract
- Ingestion: May cause gastro-intestinal disturbances

3. Composition/information on ingredients

3.1 Mixtures

- Non classified ingredients - Aqueous solution of sodium salt of polycarboxylic acid.

Concentration: 100%

CAS Number: Not applicable EC Number: Not applicable Symbols: Not applicable R/H Phrases: Not applicable Categories: Not applicable

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

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

- Seek medical attention if irritation persists

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- IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Give water or milk to drink
- When in doubt or symptoms persist, seek medical attention
- Inhalation is unlikely to occur
- If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P341).
- 4.2 Most important symptoms and effects, both acute and delayed
 - In cases of severe exposure, redness and irritation may develop
 - Vapours or aerosols may cause irritation of eyes, nose and respiratory tract
- 4.3 Indication of any immediate medical attention and special treatment needed
 - Treat symptomatically

5. Fire-fighting measures

- 5.1 Extinguishing media
 - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- 5.2 Special hazards arising from the substance or mixture
 - Smoke from fires is irritating
- 5.3 Advice for firefighters
 - Wear Positive-Pressure Breathing Apparatus

6. Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Wear protective clothing as per section 8
- 6.2 Environmental Precautions
 - No special precautions are required for this product
- 6.3 Methods and material for containment and cleaning up
 - Flush spill area with copious amounts of water
- 6.4 Reference to other sections
 - None

7. Handling and storage

- 7.1 Precautions for safe handling
 - The usual precautions for handling chemicals should be observed
- 7.2 Conditions for safe storage, including any incompatibilities
 - Store in a well-ventilated place. Keep container tightly closed (P403+P233).
 - Store in a dry place (P402).
- 7.3 Specific end use(s)
 - Contact supplier for further information

8. Exposure controls/personal protection

- 8.1 Control parameters
 - There are no recommended or established controls for this product
- 8.2 Exposure controls
 - No special precautions are required for this product
- 8.3 Occupational exposure controls







- Wear suitable protective clothing, including eye/face protection and gloves (plastic or rubber are recommended)

9. Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Odourless
 - Appearance: Liquid, pale yellow, soluble in water
 - pH 8 10 at 100 % concentration
 - Boiling point >100 °C to 760 °C
 - Vapour pressure not known
 - Completely soluble in water
 - Density: Density 1,03 1,05 g/cm3 at 20 deg C
- 9.2 Other information
 - None

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
 - None
- 10.4 Conditions to avoid
 - Avoid overheating
 - Keep away from frost
- 10.5 Hazardous Decomposition Products
 - No hazardous decomposition products known

11. Toxicological information

- 11.1 Information on toxicological effects
 - LD50 (dermal): >3000 mg/kg
 - No effects in humans
- 11.2 Contact with eyes
 - In cases of severe exposure, redness may develop
- 11.3 Contact with skin
 - In cases of severe exposure, redness and irritation may develop
- 11.4 Ingestion
 - In cases of severe exposure, gastro-intestinal disturbances may develop
- 11.5 Inhalation
 - Vapours or aerosols may cause irritation of eyes, nose and respiratory tract

12. Ecological information

- 12.1 Toxicity
 - LC50 (fish) (Polycarboxylate) >2500 mg/l (96 hr)
 - Biodegradability. OECD-test. 28 days <60 % (Polycarboxylate)
 - This product does not contain ingredients which are classified in the EU as dangerous for the environment.
- 12.2 Persistence and degradability
 - Most components in this product are not readily biodegradable.
- 12.3 Bioaccumulation Potential
 - Bioaccumulation 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
 - No information available

13. Disposal considerations

- 13.1 Waste treatment methods
 - Do not discharge into drains or the environment, dispose to an authorised waste collection point

13. Disposal considerations

- Disposal should be in accordance with local, state or national legislation
- 13.2 Classification
 - EU Waste class: -

14. Transport information

Not classified as hazardous for transport

14.1 UN

- UN No.: Not applicable
- Proper Shipping Name: Not applicable
- Hazard Class: Not applicable
- Packing Group: Not applicable

14.2 Environmental hazards

- Not Classified
- 14.3 Special precautions for user
 - Not classified as hazardous for transport
- 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.: Not applicable
- Proper Shipping Name: Not applicable
- ADR Hazard Class: Not applicable
- ADR subrisk: Not applicable
- ADR Packing Group: Not applicable

14.6 Sea (IMDG)

- IMDG UN No.: Not applicable
- Proper Shipping Name: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG subrisk: Not applicable
- IMDG Pack Group.: Not applicable
- IMDG EmS: Not applicable

14.7 Air (ICAO/IATA)

- ICAO Un No.: Not applicable
- ICAO Packing Group: Not applicable
- ICAO Hazard Class: Not applicable
- ICAO subrisk: Not applicable
- ICAO Packing Group: Not applicable

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: Not applicable
- DOT Proper Shipping Name: Not applicable
- DOT Labels: Not applicable
- Product RQ (lbs): Not applicable

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.
 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
 - Refer to The Dangerous Substances Directive (67/548/EEC)

15. Regulatory information

- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- This product is approved by the Norwegian Health Authorities and listed in Approved/evaluated chemicals for use in potable water supply onshore and offshore.
- This product is certified by NSF Standard 60 Drinking Water Treatment Chemicals.
- Offshore product registration number: Danish PR number: 1083451

15.2 Chemical Safety Assessment

- None

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