

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Identification of the substance or mixture

Product name : OBWT 4 ORGANIC  
Product type : Liquid.  
Use of the substance/mixture : Additive  
waterconditioning agent

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

Emergency Telephone Number  
Emergency Telephone: Only to be used in case of incident  
Tel: 00357 25 662068

**2. HAZARDS IDENTIFICATION**

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36/38  
Human health hazards : Irritating to eyes and skin.

See Section 11 for more detailed information on health effects and symptoms.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
2-amino-2-methylpropanol	124-68-5	10-25	204-709-8	Xi; R36/38 [1] R52/53
See Section 16 for the full text of the R-phrases declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

**4. FIRST AID MEASURES**First-aid measures

Inhalation : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## 4. FIRST AID MEASURES

- Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See Section 11 for more detailed information on health effects and symptoms.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

- Suitable : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable : None known.
- Special exposure hazards : In a fire or if heated, a pressure increase will occur and the container may burst.  
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous thermal decomposition products : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides
- Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods for cleaning up

- Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7. HANDLING AND STORAGE

- Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

### Packaging materials

- Recommended : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
No exposure limit value known.	

### Exposure controls

Occupational exposure controls	: No special ventilation requirements.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	: ☑ Wear suitable gloves tested to EN374. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.
Eye protection	: ☑ Wear safety glasses with side protection in accordance with EN 166. or face shield (EN 166) .
Skin protection	: ☑ Wear protective clothing.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

Physical state	: Liquid.
Colour	: Brown. [Dark]
Odour	: Characteristic. [Slight]

### Important health, safety and environmental information

pH	: 10,5
Boiling point	: 101°C (213,8°F)
Melting point	: -5°C (23°F)
Flash point	: Closed cup: Not applicable.
Vapour pressure	: 2,3 kPa (17,25 mm Hg)
Density	: 1,01 g/cm <sup>3</sup> [20°C (68°F)]
Auto-ignition temperature	: Not applicable.
Acid/alkali reserve	:
(g NaOH(equivalent)/100 g)	

## 10. STABILITY AND REACTIVITY

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	: No specific data.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. TOXICOLOGICAL INFORMATION

### Potential acute health effects

Inhalation	: Exposure to decomposition products may cause a health hazard.
Ingestion	: Irritating to mouth, throat and stomach.
Skin contact	: Irritating to skin.
Eye contact	: Irritating to eyes.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-amino-2-methylpropanol	LD50 Oral	Rat	2900 mg/kg	-
Conclusion/Summary	: Not available.			

### Potential chronic health effects

## 11. TOXICOLOGICAL INFORMATION

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Chronic effects : No known significant effects or critical hazards.  
 Carcinogenicity : No known significant effects or critical hazards.  
 Mutagenicity : No known significant effects or critical hazards.  
 Teratogenicity : No known significant effects or critical hazards.  
 Developmental effects : No known significant effects or critical hazards.  
 Fertility effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No specific data.  
 Ingestion : No specific data.  
 Skin : Adverse symptoms may include the following:  
 irritation  
 redness  
 Eyes : Adverse symptoms may include the following:  
 irritation  
 watering  
 redness  
 Target organs : Contains material which causes damage to the following organs: liver.

## 12. ECOLOGICAL INFORMATION

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Other ecological informationBiodegradability

Conclusion/Summary : Not available.

Bioaccumulative potential

<u>Product/ingredient name</u>	<u>LogP<sub>ow</sub></u>	<u>BCF</u>	<u>Potential</u>
Condensate Treat		-	low

Other adverse effects : No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

## 14. TRANSPORT INFORMATION

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.		--			-
ADN/ADNR Class	Not regulated.	--	-			-
IMDG Class	Not regulated.	---				-
IATA Class	Not regulated.	-	-	-		-

PG\* : Packing group

## 15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols :



Irritant

Risk phrases : R36/38- Irritating to eyes and skin.

Product use : Industrial applications.

Europe inventory : Europe inventory: Not determined.

No Chemical Safety Assessment has been done

## 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