UNIMARINE SERVICES INC

SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: CARBON REMOVER
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Cleaning agent
- 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
 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
 - Symbols: T, N
 - Toxic in contact with skin and if swallowed (R24/25)
 - Causes burns (R34)
 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R51/53)
 - Harmful: may cause lung damage if swallowed (R65)
 - Repeated exposure may cause skin dryness or cracking (R66)
 - Vapours may cause drowsiness and dizziness (R67)

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2. Hazards identification

- Classification according to Regulation (EC) No 1272/2008
- Acute Tox. 3
- Asp. Tox. 1
- Aquatic Chronic 2
- Skin Corr. 1B
- STOT SE 3

2.2 Label elements









- Signal Word: Danger

- Contains: Dichlorotoluene (Mixed isomers) - Xylenol - Kerosine, unspecified - Naphtha (petroleum), hydrodesulfurized heavy

- Hazard phrases

Repeated exposure may cause skin dryness or cracking (EUH066).

Toxic if swallowed (H301).

Toxic in contact with skin (H311).

May be fatal if swallowed and enters airways (H304).

Toxic to aquatic life with long lasting effects (H411).

Causes severe skin burns and eye damage (H314).

May cause drowsiness or dizziness (H336).

- Precautionary Phrases

Wear protective gloves/protective clothing/eye protection/face protection (P280).

Do not breathe dust/fume/gas/mist/vapours/spray (P260).

IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).

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

Immediately call a POISON CENTER or doctor/physician (P310).

Dispose of contents/container to an authorised waste collection point (P501)

2.3 Other hazards

- Odour: Unpleasant odour, Strong smell of phenol
- Appearance: Liquid, brown
- Inhalation: May cause severe irritation, May cause dizziness, confusion, headache or stupor, In cases of severe exposure, anaesthesia may develop
- Not a PBT according to REACH Annex XIII

3. Composition/information on ingredients

3.1 Mixtures

- Dichlorotoluene (mixed isomers)

Concentration: 30-60% CAS Number: 29797-40-8 EC Number: 249-854-8

R/H Phrases: R38, R51/53 - H315, H411

Symbols: Xi, N, GHS09, GHS07

Categories: Skin Irrit. 2, Aquatic Chronic 2
- Tar acids, 3,5-xylenol fraction; Distillate Phenols

Concentration: 10-30% CAS Number: 84989-07-1 EC Number: 284-896-0

R/H Phrases: R45,R46 - H301, H311, H314, H317, H411,H332, H341

3. Composition/information on ingredients

Symbols: GHS06, GHS09, GHS05, T

Categories: Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 2, Muta. 2

- Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

REACH NO: 01-21194739 77-17-0004

Concentration: 10-30% CAS Number: Not applicable EC Number: 919-164-8

R/H Phrases: R65, R66 - H304, EUH066, H412

Symbols: Xn, GHS08

Categories: Asp. Tox. 1, Aquatic Chronic 3
- Hydrocarbones, C10, aromatics, <1% naphtalene REACH NO: 01-21194635 83-34-000

Concentration: 10-30% CAS Number: Not applicable EC Number: 918-811-1

R/H Phrases: H411, H304, EUH066, H336, R65, R66, R67, R51/53

Symbols: Xn, N, GHS07, GHS08, GHS09

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).
- Wash with plenty of soap and water (P352).
- Contaminated clothing should be laundered before reuse
- 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).
- Irrigate eyes thoroughly whilst lifting eyelids
- Seek immediate medical attention
- Continue flushing with water until medical help arrives

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- IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Never make an unconscious person vomit or drink fluids
- Give plenty of water to drink
- Seek immediate medical attention

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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).
- Keep warm and at rest, in a half upright position. Loosen clothing
- When in doubt or symptoms persist, seek medical attention
- Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation
- 4.2 Most important symptoms and effects, both acute and delayed
 - Causes severe irritation
 - Has central nervous system effects
 - May cause nausea/vomiting
 - Can be absorbed through skin
 - Can cause damage to the eyes
 - The ingestion of significant quantities may cause damage to digestive system
- 4.3 Indication of any immediate medical attention and special treatment needed
 - No information available

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 toxic. Take precautions to protect personnel from exposure
 - Carbon oxides may be formed
- 5.3 Advice for firefighters
 - Substance evolves toxic fumes, wear self-contained breathing apparatus
 - Prevent run off water from entering drains if possible

6. Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Wear protective clothing as per section 8
- 6.2 Environmental Precautions
 - Do not allow to enter public sewers and watercourses
- 6.3 Methods and material for containment and cleaning up
 - Absorb spillage in inert material and shovel up
 - Place in sealable container
 - Remove contaminated material to safe location for subsequent disposal
 - Ventilate the area and wash spill site after material pick-up is complete
- 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).
 - Wear protective clothing as per section 8
- 7.2 Conditions for safe storage, including any incompatibilities
 - Store in a well-ventilated place. Keep container tightly closed (P403+P233).
 - Store in a closed container (P404).
 - Store in a dry place (P402).
 - Protect from sunlight. Store in a well-ventilated place (P410+P403).
- 7.3 Specific end use(s)
 - Not applicable

8. Exposure controls/personal protection

- 8.1 Control parameters
 - Dichlorotoluene (Mixed isomers)
 - TLV (TWA) 150 mg/m3 ()
 - Hydrocarbones, C10, aromatics, <1% naphtalene TLV (TWA) 120 mg/m3 ()
 - Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) TLV (TWA) 275 mg/m3 ()
- 8.2 Exposure controls
 - The undiluted product must not be used in a confined space without good ventilation

8. Exposure controls/personal protection

8.3 Occupational exposure controls









- Wear suitable respiratory protection. Gas cartridge (organic substances).
- Wear goggles giving complete eye protection
- Wear suitable protective clothing, including eye/face protection and gloves (neoprene or nitrile are recommended)
- Penetration time of glove material:

 The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

9. Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Unpleasant odour, Strong smell of phenol
 - Appearance: Liquid, brown, immiscible with water
 - pH: pH 10-11 at 5 % concentration
 - Boiling point > 100 °C to 760 °C
 - Density 0,995 1,015 g/cm3 at 20 deg C
 - Flash point >61 deg C (CC)
- 9.2 Other information
 - None

10. Stability and reactivity

- 10.1 Reactivity
 - This article is considered stable under normal conditions
- 10.2 Chemical stability
 - This article is considered stable under normal conditions
- 10.3 Possibility of hazardous reactions
 - No hazardous reactions known if used for its intended purpose
- 10.4 Conditions to avoid
 - Avoid overheating
- 10.5 Incompatible materials
 - May cause rubber to swell
 - Incompatible with strong oxidizing substances
 - Incompatible with alkaline earth metals
 - Incompatible with alkali metals
- 10.6 Hazardous Decomposition Products
 - Decomposition products may include carbon oxides

11. Toxicological information

- 11.1 Information on toxicological effects
 - No experimental data available
- 11.2 Contact with eyes
 - Causes severe irritation
 - Can cause damage to the eyes

11. Toxicological information

11.3 Contact with skin

- Can be absorbed through skin
- Toxic in contact with skin (H311).
- Causes redness and irritation
- Prolonged skin or eye contact may cause chemical burns

11.4 Ingestion

- Toxic if swallowed (H301).
- Can cause damage to the digestive system
- Can cause damage to the liver
- Can cause damage to the kidneys
- The ingestion of significant quantities may cause unconsciousness

11.5 Inhalation

- Causes severe irritation
- Has central nervous system effects
- May cause nausea/vomiting

12. Ecological information

12.1 Toxicity

- LC50 (fish) Acute: (Estimated: Hydrocarb. C10, aromatics) 1-10 mg/l (96 hr)
- LC50 (fish) Acute: (Hydrocarb. C10-C13...) 10-100 mg/l (96 hr)
- LC50 (fish) Acute: (Dichlorotoluene) 3,1 mg/l (96 hr)
- LC50 (fish) (xylenol) <1 mg/l (96 hr)
- This product contains components 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 Potential

12.4 Mobility in soil

- Emulsifies 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
- Disposal should be in accordance with local, state or national legislation

14. Transport information





14.1 UN

- UN No.: UN2810

14. Transport information

- Proper Shipping Name: Toxic liquid, organic, n.o.s. (Xylenol, Dichlorotoluene mixture)
- Hazard Class: 6.1
- Packing Group: III

14.2 Environmental hazards

- Road/Rail (ADR/RID)
- ENVIRONMENTALLY HAZARDOUS
- Sea (IMDG)
- Marine pollutant

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.: UN2810
- Proper Shipping Name: Toxic liquid, organic, n.o.s. (Xylenol, Dichlorotoluene mixture)
- ADR Hazard Class: 6.1
- ADR Packing Group: III
- ADR Flashpoint: >61C

14.6 Sea (IMDG)

- IMDG UN No.: UN2810
- Proper Shipping Name: Toxic liquid, organic, n.o.s. (Xylenol, Dichlorotoluene mixture)
 MARINE POLLUTANT
- IMDG Hazard Class: 6.1
- IMDG Pack Group.: III
- IMDG EmS: F-A, S-V
- IMDG Flashpoint: >61C

14.7 Air (ICAO/IATA)

- ICAO Un No.: UN2810
- Proper Shipping Name: Toxic liquid, organic, n.o.s. (Xylenol, Dichlorotoluene mixture)
- ICAO Hazard Class: 6.1
- ICAO Packing Group: III
- ICAO Flashpoint: >61C

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: UN2810
- DOT Proper Shipping Name: Toxic liquid, organic, n.o.s. (Xylenol, Dichlorotoluene mixture)
- DOT Labels: 6.1
- Product RQ (lbs): Not applicable
- DOT Flashpoint: >61C

15. Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Composition information in accordance with EC Regulation 648/2004 of the European Parliament and of the Council of 31st March 2004 on detergents:

Aromatic hydrocarbons
 Aliphatic hydrocarbons
 Anionic surfactants
 Halogenated hydrocarbons
 10-30 %
 5-15 %
 10-30 %

- Offshore product registration number: Danish PR number: 1155291
- Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Refer to The Dangerous Substances Directive (67/548/EEC)

15. Regulatory information

- This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010
- 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