	<h1 style="text-align: center; color: green;">MATERIAL SAFETY DATA SHEET</h1> <p style="text-align: center;">Conforms to Regulation (EC) No 1272/2008 (CLP)</p> <p style="text-align: center;">Product Name: M3T 3005</p> <p style="text-align: center;">Version: 1.4</p>		Reference No: MS 05 1
			Date Compiled: January 2023
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1. Product identification and Supplier Details

Trade name:	M3T 3005	Chemical Abstract No:	Not listed
Substance:	Surface Active Agent	NIOSH No:	Not listed
Substance name:	Anionic Surfactant	Hazchem Code:	Not listed
Synonyms:	Wetting agent, Spreader, Sticker	UN No:	Not listed
Product use:	Wetting, emulsification, de-agglomeration		

SUPPLY DETAILS

Name:	Marine 3 Technologies Holdings (Pty) Ltd		
Address:	86 Ridge Road, Laser Park Honeydew	Postal:	PO Box 33 Honeydew 2040
		E-mail:	info@mosmart.co.za
	Roodepoort,		
Tel No:	011 675 0860	Fax:	011 475 1886

2. Hazards Identification:

2.1 Classification of the substance



Signal word

Warning

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP):

Physical Hazard:

No physical hazards

Health Hazards:

H303: May be harmful if swallowed

H319 : Causes serious eye irritation

Prevention:


P264 – Wash hands thoroughly after handling

P281 – Use personal protective equipment as required

P312 – Call a Poison Center or doctor if you feel unwell.

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

P337+P313: If eye irritation persists: Get medical attention.

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3. Composition:

Hazardous components:	>50% Activated Sea Water <40% Proprietary IP
EU classification:	Surface Active Agent (SIC 2843)
Risk Phrases:	Non Toxic, Non Corrosive, Xi (Irritant)

4. First Aid Measures:

Eye Contact:	Check for and remove any contact lenses. Flush out eyes with water. If irritation persists, seek medical attention.
Skin Contact:	Wash with plenty water.
Product ingested:	Wash mouth out with plenty water. If large quantity is ingested, do not induce vomiting.
Product inhaled:	Remove from contaminated area. Other measures are unnecessary

5. Fire Fighting Measures:

Extinguishing media:	Not flammable.
Special precautions/procedures:	Can be used as extinguishing medium.
Protective clothing:	Normal protective clothing

6. Accidental Release Measures:

Personal precautions:	Rubber gloves and goggles. Slippery surfaces.
Environmental precautions:	Wash with abundant plenty water, not hazardous to environment
Small spills:	Clean up excess and wash remainder down normal drainage with plenty water.
Large spills:	Wash away with large quantities of water.
Neutralising agents (where applicable):	Water

7. Handling and Storage:

7.1 Precautions for safe Handling

Do **not** eat; drink or smoke in working areas. Wash hands after use. Use suitable water – impermeable gloves when handling product to avoid contamination to product and other tools in the work area. Wear suitable protective overalls when handling product. Wash containers with plenty of water if soiled with product, on the outside, ensure lid is tightly closed before this is done. Avoid spilling product over large areas and clean as soon as product is spilled.

7.2 Conditions for safe storage

Store in a cool dry place with lids tightly closed.

Mix thoroughly before use.

Storage Class : 12 (non –combustible liquid as per TRGS 510)

Specific Use: Wetting, emulsification, de-agglomeration

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8. Exposure Controls/Personal Protection:

Occupational exposure limits:	Not determined
Engineering control measures:	ISO 9001 material handling standards
Personal protection:	When handling product, use personal protective overalls, protective rubber gloves and protective eyewear
Hygiene measures:	Avoid prolonged contact with concentrated product as it can cause slight skin irritation & Degreasing. Washing facilities with running water must be available.

9. Physical and Chemical Properties:


Appearance:	White semi gel liquid
Odour:	Odourless
pH:	7 to 8
Boiling point:	100 C°
Melting point:	3 C°
Freezing point:	0 C°
Flash point:	700 C°
Flammability:	Non-flammable
Auto flammability/self-combustion:	None
Explosive properties:	Non-explosive
Oxidizing properties/limit:	None
Vapour pressure:	Not determined
Density/specific gravity:	1.2
Solubility - water:	Soluble
Solubility - solvent:	Soluble
Solubility - coefficient:	1

10. Stability and Reactivity:


10.1 Reactivity:	None under normal use
10.2 Chemical Stability:	The mixture is chemically stable.
10.3 Possibility of Hazardous Reactions:	None
10.4 Conditions to avoid:	None
10.5 Incompatible materials:	None
10.6 Hazardous decomposition products	NaCl and AES

11. Toxicological Information:

(a) Acute toxicity: Rat LC50:	10 000mg/kg
(b) Skin Irritation	Not determined
(c) Eye irritation:	Not determined
(d) Respiratory or skin sensation	Not determined

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(e) Germ and Cell Mutagenicity:	Not determined
(f) Carcinogenicity:	Not determined
(g) Reproductive Toxicity:	Not determined
(h) Chronic toxicity:	Not determined
(i) Neurotoxicity:	Not determined
12. Ecological Information:	
Aquatic toxicity - fish:	60-d <i>Saccobranthus fossilis</i> EC20: 2 240 mg/ℓ
Aquatic toxicity - daphnia:	48-h <i>Daphnia pulex</i> LC50: 510 mg/ℓ
Aquatic toxicity - algae:	72-h <i>Selenastrum capricornutum</i> Printz (algal) EC50: 2 035 mg/ℓ
Aquatic toxicity - bacteria:	6-h <i>Pseudomonas putida</i> (bacterial) EC50: 874 mg/ℓ
Biodegradability:	0.48 d ⁻¹ to 0.7 d ⁻¹ in surface water and 0,28 d ⁻¹ in soil
Bio-accumulation:	2.5%
Mobility:	Not determined
Other:	The low composition of this product will have no ecological effect. The product is readily biodegradable. The product enhances bacteria growth.
13. Disposal Requirements:	
Disposal methods:	According to local council requirement of a non toxic product
Disposal of packaging:	Return to supplier or can be disposed of as domestic waste.
14. Transport Information:	
UN No:	Not classified as dangerous goods
Substance identity No:	HS Code: 3402.11
ADR/RID	Not classified as dangerous in the meaning of transport regulations
DOT (US)	Not classified as dangerous in the meaning of transport regulations
IMDG	Not classified as dangerous in the meaning of transport regulations
IATA	Not classified as dangerous in the meaning of transport regulations
15. Regulatory Information:	
15.1 Safety, health and environmental regulations/ legislation specific for substance or mixture.	
Labelling according to EC directive	
No labelling required. The classification has been assessed following the conventional method regulation (EC) No 1272/2008 (CLP)	
EU Hazard classification:	Not listed
Risk phrases:	Xi 36/38
Safety phrases:	None
National Legislation:	None
16. Shelf Life	
Two years from date of manufacture	

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17. Other Information:

Relevant hazard statements (Number and Full text)

H315: Causes mild skin irritation after prolonged exposure.

This information is based on collective and current knowledge, is intended to describe the product for purposes of safety, environmental and health requirements only. It should therefore not be construed as guaranteeing any specific property of the product.


MSDS modified: 17 January 2023

Prepared by: M. Thomas – Lab Technician

A. Du. Plessis – QMS Rep


The employer must, in order to avoid the spread of contamination of a Hazardous Substance (HS), take steps, as far as reasonably practicable, to ensure:

- [a] that the HS in storage or distributed are properly identified, classified and handled in accordance with SANS 10206 and SANS 10228;
- [b] that a container or a vehicle in which an HS is transported, is clearly identified, classified and packed in accordance with SANS 10228 and SANS 10229; and
- [c] That any container into which an HS is decanted is clearly labelled with regard to the contents the

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APPENDIX A: HAZARDOUS RATING EXPLAINED; M3T IS CLASSIFIED AS INSIGNIFICANT (1) BELOW

HAZARDOUS RATING	HEALTH (Effect on health through inhalation, absorption or ingestion and effect on skin or eyes on direct contact)	FIRE/EXPLOSION										
EXTREME (5)	Capable of causing death after short exposure to small quantities or death / major injury on any contact with a small amount of concentration. i.e. Oral toxicity LD ₅₀ ≤ 5 mg/kg Dermal toxicity LD ₅₀ ≤ 40 mg/kg Inhalation toxicity LC ₅₀ (Dust and mist – 1 hour of exposure) ≤ 0,5 mg/l Inhalation toxicity LC ₅₀ (Saturated vapour – 1 hour of exposure) ≤ 1 000 ml/m ³	Flash point below 23 °C (extremely flammable.) Toxicity Index > 5 (SABS Method TI)										
HIGH (4)	Capable of causing major temporary or major permanent health effects after short, frequent or prolonged exposure to small quantities or significant injury on any contact with a small amount or concentration. i.e. Oral toxicity LD ₅₀ > 5 – 50 mg/kg Dermal toxicity LD ₅₀ > 40 – 200 mg/kg Inhalation toxicity LC ₅₀ (Dust and mist – 1 hour of exposure) > 0,5 – 2 mg/l Inhalation toxicity LC ₅₀ (Saturated vapour – 1 hour of exposure) ≤ 3 000 ml/m ³	Flash point between 23 °C and 38 °C. Highly flammable. Toxicity Index > 4 – 5 (SABS Method TI)										
MODERATE (3)	Capable of causing temporary or permanent health effects after short, frequent or prolonged exposure or injury with frequent or prolonged contact. Not life threatening or capable of causing serious effects in excessively large quantities.	Flash point between 38 °C and 93 °C. Highly flammable. Toxicity Index > 3 – 4 (SABS Method TI)										
LOW (2)	Capable of causing: - minor and readily reversible health effects on short, frequent or prolonged exposure. - Minor and readily reversible skin or eye irritation on any direct contact or repeated contacts. i.e. <table><tr><td><u>Solids</u></td><td><u>Liquids</u></td></tr><tr><td>Oral toxicity LD₅₀ > 50 – 200 mg/kg</td><td>> 50 – 500 mg/kg</td></tr><tr><td>Dermal toxicity LD₅₀ > 200 – 1 000 mg/kg</td><td>> 200 – 1 000 mg/kg</td></tr><tr><td>Inhalation toxicity LC₅₀ (Dust and mist – 1 hour of exposure) > 2 – 10 mg/l</td><td>> 2 – 10 mg/l</td></tr><tr><td>Inhalation toxicity LC₅₀ (Saturated vapour – 1 hour of exposure) < 5 000 ml/m³</td><td></td></tr></table>	<u>Solids</u>	<u>Liquids</u>	Oral toxicity LD ₅₀ > 50 – 200 mg/kg	> 50 – 500 mg/kg	Dermal toxicity LD ₅₀ > 200 – 1 000 mg/kg	> 200 – 1 000 mg/kg	Inhalation toxicity LC ₅₀ (Dust and mist – 1 hour of exposure) > 2 – 10 mg/l	> 2 – 10 mg/l	Inhalation toxicity LC ₅₀ (Saturated vapour – 1 hour of exposure) < 5 000 ml/m ³		Flash point above 93 °C (will burn when heated.) Toxicity Index > 1,5 – 3 (SABS Method TI)
<u>Solids</u>	<u>Liquids</u>											
Oral toxicity LD ₅₀ > 50 – 200 mg/kg	> 50 – 500 mg/kg											
Dermal toxicity LD ₅₀ > 200 – 1 000 mg/kg	> 200 – 1 000 mg/kg											
Inhalation toxicity LC ₅₀ (Dust and mist – 1 hour of exposure) > 2 – 10 mg/l	> 2 – 10 mg/l											
Inhalation toxicity LC ₅₀ (Saturated vapour – 1 hour of exposure) < 5 000 ml/m ³												
INSIGNIFICANT (1)	No known: - health effect other than minor effects from excessively large quantities. - skin or eye effects on contact whether frequent or prolonged.	Will not burn under most normal conditions. Toxicity Index > 0 – 1,5 (SABS Method TI)										

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