



MATERIAL SAFETY DATA SHEET

F-500 MULTI-PURPOSE ENCAPSULATOR AGENT

Date Prepared: 21 April 2014

Issued by: Hazard Control Technologies, Inc.

Not Classified as Hazardous

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Product Not Applicable - Blend
Company Hazard Control Technologies, Inc.
Product Name F-500 Encapsulator Agent
Company Name Environmental Hazard Management Pty Ltd.
Address 2349 Grenfell Road
COWRA NSW 2794 Australia
Emergency Telephone # + 61 438 886 359 / +61 412 904 097
Company Telephone # +61 732 767 988
Email gph@environhazman.com
Recommended Use Firefighting agent; spill control encapsulator

2. HAZARDS IDENTIFICATION

Hazard Classification Not classified as hazardous
Safety Phrase(s) R36/38 - Irritant. Avoid contact with skin and eyes

3. COMPOSITION / INFORMATION ON INGREDIENTS

The composition of this mixture is proprietary information. In the event of a medical emergency, compositional information will be provided to a physician or nurse.

NAME	CAS	PROPORTION
Nitritolriethanol aliphatic soap	Trade Secret	1-4.5%
Alkyl ether amine reaction with aliphatic acids	N/A Mixture/Preparation	25-55%
Linear aliphatic alcohols	N/A Mixture/Preparation	3-10%
Water	7732-18-5	35-55%

4. FIRST AID MEASURES

Inhalation Immediately remove the affected victim from exposure and administer fresh air. Apply artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

Ingestion Do NOT induce vomiting. If individual is conscious, give plenty of water or milk to dilute stomach contents. Keep warm and quiet. Get prompt medical attention. Do NOT attempt to give anything by mouth to an unconscious person.

Skin Immediately flush with large amounts of water, use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. If irritation persists, seek medical attention.

Eye Immediately flush eyes with large amounts of water for at least 15 minutes. Seek prompt medical attention if irritation persists.



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First Aid Facilities

Eyewash and normal washroom facilities

Advice to Doctor

Product has a neutral pH. Working solutions when heated above 75°C can cause respiratory irritation such as typical of mild acids and should be treated as such. Skin or eye contact with product should be flushed with water to reduce irritation.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Apply water to extinguish
Hazards from Combustion Products	Product is non-combustible
Precautions in Connection with Fire	Non-flammable liquid concentrate

SPECIAL FIRE FIGHTING INSTRUCTIONS: Product is a fire fighting extinguishing agent. Product is a non-flammable liquid; however, exposure to high heat for extended period of time could cause combustion. If combustion occurs, apply water to extinguish.

NOTE: No hazardous byproducts are known.

6. ACCIDENTAL RELEASE MEASURES

Land Spill	Product is not a hazardous waste. Dispose of in accordance with government regulations. When product is used to mitigate a hazardous material, the resultant material must be handled in the same fashion as the hazardous material. Contain liquid with sand or earth. Do not use combustible materials such as sawdust. Recover liquids by pumping (use an explosion proof or hand pump if recovering flammable liquids) or with a suitable absorbent. Consult an expert on disposal of recovered material.
Water Spill	Dike or contain any spill. Avoid direct discharge into any body of water. Diluted product may be acceptable in municipal wastewater treatment plants.

7. STORAGE AND HANDLING

Precautions for Safe Handling	Keep containers closed until ready for use. Handle any open containers with care. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.
Conditions for Safe Storage	Store in cool, well ventilated area away from incompatible materials. Protect material from direct sunlight. This material is not a static accumulator, but use proper grounding procedures. Do NOT pressurize, cut, heat or weld containers.

SHELF LIFE (unopened container): 15 years unopened container.



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STORAGE TEMPERATURE: 1.5°C -54.5°C

STORAGE/TRANSPORT PRESSURE: Atmospheric

LOADING/UNLOADING VISCOCITY: 85 cP at 21°C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards	Nil established
Biological Limit Values	Nil allocated
Engineering Controls	Provide sufficient ventilation with local exhaust ventilation system in an enclosed area.
Respiratory Protection	Typically respiratory protection is not required under normal conditions of use.
Eye Protection	Wear protective eyewear.
Hand Protection	Wear gloves.
Body Protection	Where contact is likely, wear long sleeves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber liquid
Odour	Mild
Melting Point	-3°C
Boiling Point	118°C
Solubility in Water	Complete at 20°C
Specific Gravity	0.990 g/cc
pH Value	6.9 - 7.1 pH
Vapour Pressure (Air=1)	2,666 Pa @ 25°C
Flash Point	N/A
Flammability	Non-flammable liquid
Auto-Ignition Temperature	N/A
Explosion Limits (lower/upper)	Non-explosive

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to Avoid	Avoid contact with strong oxidizing agents
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	None identified
Hazardous Polymerization	Will not occur



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11. TOXICOLOGICAL INFORMATION

Toxicology Information	EC ₅₀ (microbial toxicity) – <i>Activated Sludge Microorganisms</i> – 3,000.00mg/L LC ₅₀ (aquatic toxicity) – <i>Pimephales promelas</i> – 1.20 mg/L LD ₅₀ (acute oral toxicity) – Rat (<i>Rattus norvegicus</i>) -> 5.00 gr/kg Non-Mutagenic (OECD Guidelines Section 471)
Ingestion	May cause gastro-intestinal irritation if ingested.
Skin	Frequent or prolonged contact may cause minor irritation and/or drying. OECD 401-Non skin sensitizing.
Eye	Can cause local irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity	F-500 contains no reportable ingredients
Persistence/Degradability	100% Biodegradable
Mobility	High mobility
Bioaccumulative Potential	Nil
Environmental Protection	Prevent spilled material from entering sewers, waterways, or any body of water
Acute Toxicity – Other Organisms	Nil Known
Biological Oxygen Demand (BOD₅) (mg/L)	12,000 at 3% solution
Chemical Oxygen Demand (COD) (mg/L)	58,000 at 3% solution
Corrosivity	8 micrometers/year (same as fresh water)

13. DISPOSAL CONSIDERATIONS

Disposal Considerations	Handle open containers with care. Empty product containers may contain residue. Triple rinse empty containers and add rinse water to working solution. Empty container is recyclable.
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14. TRANSPORT INFORMATION

Transport Information	Transport under atmospheric pressure conditions and avoid freezing or high temperatures in excess of 55°C. Transportation class: Cleaning agents not otherwise specified.
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15. REGULATORY INFORMATION

Regulatory Information	Not classified as hazardous
Poisons Schedule	Not scheduled



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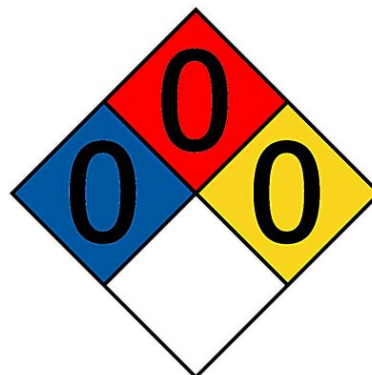
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16. OTHER INFORMATION

NPCA-HMIS

HEALTH	/	0
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION	 	
		np

NFPA 704



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