

Date of issue: 19 January 2023
Revised by: Simonne Moses - HSNO Consultant SDS No: 1

Safety Data Sheet

F-500 Encapsulator Agent

Classified as: Hazardous according to the EPA Hazardous Substances
(Hazard Classifications) Notice 2020.

Section 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name: F-500 Encapsulator Agent

Other Names: F-500EA, F-500 Multi-Purpose Encapsulator Agent

Supplier: Landlogic Ltd
25 John Morten Place
Rolleston 7614
New Zealand

Phone: +64 3 344 0006

Recommended Use: Fire suppressant and flammable vapour mitigation agent.

In Case of Emergency Contact:

CHEMCALL: 0800 CHEMCALL (0800 243 622)

Section 2: HAZARDS IDENTIFICATION

This product is not classified as a Dangerous Good for Transport.

This product is classified as hazardous according to criteria in the EPA Hazardous Substances (Hazard Classifications) Notice 2020.

Classified under the group standard "Fire Fighting Chemicals Group Standard 2020"

HSNO APPROVAL NUMBER: **HSR002573**

HSNO CLASSIFICATIONS: 6.3A – Skin irritant
8.3A– Eye corrosive

GHS Classification: Skin irritation – Category 2
Serious eye damage – Category 1

Hazard Statements:

H315 Causes skin irritation
H318 Causes serious eye damage

GHS Pictograms:



DANGER

PREVENTION STATEMENTS:

- P103 – Read label before use.
- P264 - Wash hands, exposed skin, thoroughly after handling.
- P280 - Wear protective gloves, protective clothing, eye protection, face protection.

RESPONSE STATEMENTS:

- P101 – If medical advice is needed, have product container or label at hand.
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
- P321 – Specific treatment (see first aid panel on this label).
- P332 + P313 – If skin irritation occurs: Get medical advice/attention.
- P362 – Take off contaminated clothing and wash before re-use.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 - Immediately call a POISON CENTER or doctor/physician.

DISPOSAL

- P501 - In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Dispose of via an approved waste disposal contractor. Refer to Section 13 of the SDS.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Mixture: Fire suppressant – does not contain PFOS, PFOA, or fluorine ingredients.

Main Component	CAS Number	Concentration (% wt)
Fatty alkyl ethers reaction products with aliphatic acids	72245-02-4	40 - 50%
Alcohols C6-12	68603-15-6	5 - 8%
2,2',2"-Nitrilotrisethanol aliphatic acid soap	38584-87-1	2 - 4%

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.

Section 4: FIRST AID MEASURES

Workplace Facilities Required:	Eye wash and safety shower facilities should be provided.
If Inhaled:	Remove to fresh air. Seek medical attention if symptoms develop.
In Contact with Eye:	Hold eyes open, flush continuously with water for at least 20 minutes. Seek immediate medical attention.

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In Contact with Skin: Wash skin with plenty of water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek medical attention if skin irritation develops and persists.

If Swallowed: DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head below hips to prevent aspiration to lungs. Seek medical attention.

Advice to Doctor: Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Fire/Explosion Hazard: Product is a fire suppressant and is not flammable or combustible. However, exposure of product to high heat over extended periods may cause combustion.

Suitable Extinguishing Media: Use extinguishing agent suitable for surrounding fire.

Precautions in Connection with Fire: Combustion may produce oxides of carbon and hydrocarbons.

Advice for firefighters: Wear full firefighting gear and self-contained breathing apparatus.

Section 6: ACCIDENTAL RELEASE MEASURES

An emergency response plan complying with Part 5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 is required when held in quantities greater than 10,000L.

Precautions: Clear area of all unprotected personnel. Keep unnecessary and unprotected personnel from entering area. Avoid release of concentrate to waterways.

Suitable Protective Equipment: Avoid contact with skin and eyes. Emergency responders must use personal protective equipment, including gloves, protective overalls and footwear, and safety goggles. Use respiratory protection if there is a risk of inhalation.

Spill or Leak Procedures. Shut off source of spill if safe to do so. Contain the spill and use inert absorbent material such as sand or earth to soak up spill. Collect spill and absorbent material into a waste container. Ensure waste container is properly labelled.

Where the product is used for mitigation of a hazardous substance, the resultant mixture should be handled in accordance with the requirements of the hazardous substance.

Waste Disposal Methods: Dispose of as per Section 13.

Emergency preparation: Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with skin and eyes. Do not eat, drink, or smoke when using this

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product. Remove contaminated clothing and wash hands and face before entering eating areas.

Storage: Keep containers closed when not in use. Store in original container in a cool, dry, well-ventilated area. Store away from incompatibles (refer Section 10). Keep out of direct sunlight. Storage temperature 1-54°C.

Site Storage Requirements: Site Signage will be required when quantities exceed 1,000L.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards NZ: No Workplace Exposure Standards have been established for this product.

Engineering Controls: Eyewash facilities and safety showers should be provided in the work area where there is a risk of exposure to eyes and skin.

Personal Protective Equipment: Avoid contact with the skin and eyes.

Hand protection: Wear protective gloves that are resistant to the product. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.

Skin and body protection: Use protective clothing. Remove any contaminated clothing to avoid prolonged contact with the skin. Wash work clothes regularly. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.

Eye protection: Use chemical safety glasses with side shields or safety goggles to protect eyes. Refer to AS/NZS 1336 for suitable eye and face protection.

Respiratory protection: Where there is inadequate ventilation and use results in exposure to mists/sprays/vapours use a respirator. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection.

Other information: PPE selected must be impervious to the substance. Do not eat, smoke, or drink where material is handled, processed, or stored. Wash hands carefully before eating, drinking, or smoking. Handle in accordance with safe industrial hygiene practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Description:	Liquid	Colour:	Amber
Odour:	Mild	Odour Threshold:	Not available
pH:	6.9 – 7.1	Solubility:	Soluble
Freezing point:	-3°C	Boiling Point:	114°C
Flammability:	Not flammable	Flash Point:	>93°C
LEL/UEL:	Not applicable	Vapour Pressure:	2666 hPa (25°C)
Decomposition Temp:	Not available	Autoignition Temp:	Not available
Relative Density:	0.98 – 1.0 (water = 1)	Vapour Density:	Not available
Partition Coefficient: n-octanol/water	Not available	Viscosity:	70 – 100 cPs
Particle characteristics:	Not applicable		

Section 10: STABILITY AND REACTIVITY

Stability:	Stable under normal cool, dry storage conditions.
Reactivity:	Not reactive under normal conditions of use.
Conditions to Avoid:	Store out of direct sunlight.
Incompatibility:	Keep away from strong oxidising agents.
Hazardous Decomposition:	Decomposes during combustion to form oxides of carbon and hydrocarbons.

Section 11: TOXICOLOGICAL INFORMATION

Acute Exposure

Acute Toxicity:	LD ₅₀ oral > 2000 mg/kg LD ₅₀ dermal > 2000 mg/kg LC ₅₀ inhalation > 5 mg/L (mist)
Inhalation:	Inhaling high concentrations of mists/sprays/vapours may cause irritation.
Ingestion:	May cause nausea and vomiting if large quantities are ingested.
Skin Contact:	Skin irritant.
Eye Contact:	Eye corrosive.
Sensitiser:	Not expected to be a respiratory or contact sensitiser.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive Toxicant No chronic toxicity effects expected.

Specific Target Organ Systemic Toxicity: No effects expected.

Toxicity data is based on hazardous ingredient information and information in the European Chemical Agencies Database.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Product may be harmful to the aquatic environment on initial exposure but is not expected to have long-term effects. Avoid release of concentrate to waterways.
Persistence/degradability:	Expected to be readily biodegradable.
Bioaccumulation:	Not expected to bioaccumulate.
Mobility:	Product is readily soluble in water. Ecotoxicity data is based on hazardous ingredient information.

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Section 13: DISPOSAL CONSIDERATIONS

Disposal: Recycle and reuse wherever possible. Dispose of waste product via an approved waste disposal contractor.

Disposal of Packaging: Packaging may contain product residues and should be treated as hazardous. Dispose of packaging via an approved waste disposal contractor.

Section 14: TRANSPORT INFORMATION

Not classified as a Dangerous Good for transport in accordance with NZS5433:2020, IMDG or IATA.

Ensure transportation methods prevent leakage from packages and collapsing loads.

Section 15: REGULATORY INFORMATION

Group Standard Allocation: Fire Fighting Chemicals Group Standard 2020

HSNO Approval Code: HSR002573

Classifications: Skin irritation – Category 2
Serious eye damage – Category 1

NZIOC: All hazardous ingredients are listed in the NZ Inventory of Chemicals database.

This substance triggers:	Compliance Certificate	N/A
	Certified Handler	N/A
	Quantity that must be secured	N/A
	Emergency Response Plan	10,000L
	Secondary Containment	10,000L
	Signage	1,000L

This substance is not required to be Tracked. All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for the hazards associated with this substance.

Section 16: OTHER INFORMATION

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO for use as a fire fighting chemical. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most up-to-date knowledge available at the date given in Section 16. No liability is assumed for any damages related to the use or misuse of this substance.

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All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Issued: 19/01/2023

Reason for Revision: Update to New Zealand regulatory requirements.

References:

EPA NZ Chemical Classification and Information Database
European Chemical Agencies Database
EPA Guide: Assigning a Hazardous Substance to a Group Standard, 2014
Supplier SDS: Firestryker Australasia, F-500 Encapsulating Agent, January 2021

END OF SAFETY DATA SHEET