



SAFETY DATA SHEET

BioSpread®

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: **BioSpread®**

1.2 Recommended use of the chemical and restrictions on use

Product Use: An organo-silicone super spreader and surfactant for use with fungicides, insecticides, herbicides, plant growth regulators and foliar fertilisers.

1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited
Address: 20 Jean Batten Drive Mt Maunganui, 3116
Telephone: 0800 220 002
Email: info@grosafe.co.nz

Emergency telephone number 0800 CHEMCALL (0800 243 622)

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Hazardous Chemical

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996

HSNO Substance Approval: HSR002503

Classifications: Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Skin irritation Category 2, Serious eye damage Category 1, Hazardous to the aquatic environment chronic Category 2.

2.2 Label elements:

Pictograms:



Signal Word: DANGER

Hazard statements:

- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:*Prevention*

- P102 Keep out of reach of children.
- P103 Read label before use.
- P261 Avoid breathing mist/vapours/spray.
- P264 Wash hands and any exposed skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves and eye protection.

Response

- 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.
- P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
- P332 + P313 If skin irritation occurs: Get medical advice.
- P362 Take off contaminated clothing and wash before reuse.
- P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTRE or doctor if you feel unwell.
- P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- + P338
- P310 Immediately call a POISON CENTRE or doctor.
- P391 Collect spillage.

Storage

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Disposal

- P501 Dispose of contents/container in accordance with local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion % w/w
heptamethyltrisiloxane, allyl ether, ethoxylate, propoxylate	134180-76-0	>60

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General Information:**

For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766]. Have label or Safety Data Sheet at hand

Ingestion: If swallowed, do NOT induce vomiting. Rinse mouth. Get medical advice if you feel unwell.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. If you feel unwell or irritation persists then get medical advice.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice immediately.

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor for advice if person feels unwell.

4.2 Symptoms caused by exposure

None specified.

4.3 Medical attention and special treatment

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Water spray (fog), foam, dry powder, carbon dioxide. Do not use a full water jet.

5.2 Specific hazards arising from the chemical

Smoke and toxic/harmful fumes.

5.3 Special protective equipment and precautions for fire fighters

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).
Contain run-off to prevent run-off to sewers and waterways.

5.4 Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

In the event of an accidental spill, wear full protective clothing, eye and face protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

6.2 Environmental precautions

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses occurs or is unavoidable, warn the local water authority.

6.3 Methods and materials for containment and cleaning up

Contain spilled material, recover into labelled drums that can be sealed for safe disposal. If spray mixture is spilled, recover liquid or absorb with inert material e.g. vermiculite, soil and collect in drums. Deal with all spillages immediately.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read the label before use. Use only outdoors or in well-ventilated environment. Avoid contact with skin and eyes. Avoid inhalation of spray mists. Wear coat/trouser (overalls), boots, waterproof hat, respirator, gloves and eye protection when handling product. Wash hands and exposed skin after handling. Do not eat, drink or smoke when using. Contaminated work clothing should not leave the work place. Do not use spray equipment contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable cleaning detergent.

7.2 Conditions for safe storage

Store securely in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area. Keep away from food, drink and animals feeding stuffs.

Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing 1000 L or more require secondary containment, signage and emergency response plan.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

None specified.

8.2 Engineering controls

Use outdoors to ensure adequate ventilation.

8.3 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Eye/Face Protection: Wear protective glasses or goggles when mixing or applying product.

Skin Protection: Wear impervious gloves (nitrile, natural latex, neoprene, butyl), coat, trousers, waterproof hat. Ensure all skin areas are covered.

Respirator: Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a type A-P2 cartridge.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light yellow coloured liquid
Odour	Characteristic
Odour threshold	No data available
pH	Not Available
Freezing Point	<0°C
Boiling Point /Range	>200°C
Flash point	>149°C (TCC)
Flammability (solid, gas)	Not applicable
Vapour Pressure	Not available
Vapour density	Not available
Relative density	1.0 – 1.1 (25°C)
Solubility	Soluble in water
Partition Co-efficient n-octanol/water	Not available
Auto-ignition temperature	335 (minimum ignition temperature)
Decomposition temperature	Not available
Viscosity (dynamic)	50 – 100 mPa.s (25 °C)
Particle characteristics:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No reactions expected.

10.2 Chemical stability

Store in the closed original container in a dry, cool, well-ventilated area.

10.3 Conditions to Avoid

Incompatible materials.

10.4 Incompatible materials and possible hazardous reactions

None identified.

10.5 Hazardous decomposition products

Fire Decomposition: Smoke and unspecified compounds.

10.6 Polymerisation:

This product will not undergo polymerisation reactions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product.

11.2 Toxicological information

Acute toxicity:	Classified as being harmful in contact with skin or if inhaled.
Aspiration hazard:	Product is not classified with aspiration hazard warning.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	Skin irritant (ECHA database).
Serious eye damage/irritation:	Causes eye damage (ECHA database).
Respiratory or skin sensitisation:	Not classified for skin and respiratory sensitisation.
Germ cell mutagenicity:	No ingredients in product identified as presumed or suspected mutagens.
Carcinogenicity:	No ingredients in product identified as presumed or suspected carcinogens.
Reproductive toxicity:	Not classified for reproductive/developmental effects.
Specific target organ toxicity – single/repeated exposure:	Not classified for adverse effects to organs or systems through prolonged or repeated exposure.
Narcotic effects:	None identified.

11.3 Toxicological data:

Oral LD₅₀ (rat) > 10000 mg/kg bw
Dermal LD₅₀ (rabbit) 4500 mg/kg bw
Irritation - Eye (rabbit): 0.02 ml mod-SEVERE

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is classified as being toxic to aquatic life with long lasting effects.

12.2 Environmental Fate

Persistence and Biodegradability:

No data available.

Bioaccumulation: No data available.

Soil mobility: No data available.

Other adverse effects: No data available.

Ecotoxicity data: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Use the product for its intended purpose according to label. Otherwise dispose of unused product to waste management facility for pesticides or to landfill.

13.2 Container Disposal

Do not use packaging for storage of other products. Triple rinse container and add residue to mixture. If circumstances, especially wind direction, permit the empty containers may be burned, otherwise bury in a suitable land fill.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport:

Classified as Dangerous Good Class 9 according to NZS5433 Transport of Dangerous Goods on Land

Marine Transport (IMO/IMDG):

Classified as Dangerous Good Class 9 by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Classified as Dangerous Good Class 9 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

UN Number:	3082
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains heptamethyltrisiloxane, allyl ether, ethoxylate, propoxylate)
Transport hazard class(es)	9
Packing Group:	III
Special Precautions for User:	
IMDG Marine pollutant:	Yes
Transport in Bulk:	-
HAZCHEM	3Z

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

Hazardous substance according to Hazardous Regulations.

Approved substance number: HSR002503

Group Standard: Additives Process Chemicals and Raw Materials Subsidiary Hazard Group Standard 2020. This substance is to be managed using the conditions specified in this applicable Group Standard.

Hazardous classifications: Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Skin irritation Category 2, Serious eye damage Category 1, Hazardous to the aquatic environment chronic Category 2.

Controls: refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)

Safety Data Sheet:	Any quantity
Restricted to workplace only:	No
Quantity that requires management in accordance with HSW HS Regulations:	1000 L
Quantity for secondary containment and emergency response plan:	1000 L
Quantity for signage:	1000 L

15.2 ACVM Act 1997

Registration number: Not applicable (exempt)

Refer to www.foodsafety.govt.nz for registration conditions.

SECTION 16: OTHER INFORMATION

16.1 Date of preparation or last revision of SDS

SDS issued	26 October 2021
SDS supersedes	17 February 2020
Reason issued	Update SDS format, hazardous classifications and product information.

16.2 ABBREVIATIONS

ADI	Acceptable Daily Intakes
CAS number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
ErC₅₀	Half maximal Effective Concentration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC₅₀	Median Lethal Concentration
LD₅₀	Median Lethal Dose
SDS	Safety Data Sheets
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
SWA	Safety Work Australia
TWA	Time-Weighted Average
UN Number	United Nations Number

16.3 REFERENCES

Manufacturer information
EPA CCID and Approved Substance databases
University of Hertfordshire Pesticides Properties Database

16.4 OTHER

BioSpread is a trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet