



KREOSTIM MSDS

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product : **Kreostim – Super Concentrate**
Common Name : None.
Application : Promoter of microbial function and plant nutrient transfer.
Chemical Description : Natural starch-based chelators, saccharides plus other organics, phyto-proteins, vitamins and plant hormones; containing organically held N P K and minor [Ca, Mg, S, Cl] and trace [Fe, Mn, Zn, Si, Cu, B, Mo, Co] and ultra-trace [Se, I, Cr, Ni, F, Ti, Li, V, etc] elements
TSCA/CAS No.: This product is a mixture - there is no specific CAS number.
ACO Certified Organic: ACO Certified Allowed Input No. 11571 Australia

Manufactured By:
Converte
Griffith NSW 2680
P O Box 8159, Australia

Emergency Phone Numbers
Emergency Telephone: Australia 1800 108 940 / 0419120447

SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO	%	TLV OR PE L
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None of the components in are deemed hazardous at the concentrations supplied or dilutions and dose rates suggested. Only small amounts are required for field applications with rates of 250ml / hectare advised.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Dark brown viscous liquid with distinctive odour from sugars and seaweed extracts. Mild irritant to eyes and skin. If ingested, may cause stomach cramps and/or nausea. High temperatures may result in decomposition to carbon oxides and sulfur trioxide fumes. Contain any liquid runoff. Not a D.O.T. hazardous material.

Overall hazard ratings : HEALTH: 1 REACTIVITY: 0 FLAMMABILITY: 0
ENVIRONMENT: 1

(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)



SECTION 4. FIRST AID

- Eyes:** Flush immediately with water for at least 15 minutes. Call a physician if eye irritation persists.
- Skin:** Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. See a physician if skin becomes irritated.
- Ingestion:** If conscious and alert, drink water or milk to dilute, then induce vomiting. Call a physician or Poison Control Centre immediately.
- Inhalation:** Move to fresh air. If breathing becomes difficult, call a physician.

SECTION 5. FIRE AND EXPLOSION HAZARDS

Flash Point:	> 400 C.
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Flammability Classification:	Non-combustible.
Known Hazardous Products of Combustion:	Carbon and sulphur Oxides > 500 C
Properties that Initiate/Contribute to Intensity of Fire:	None.
Potential For Dust Explosion	None.
Reactions that Release Flammable Gases or Vapours:	Sodium metal.
Potential For Release of Flammable Vapours:	None.
Unusual Fire & Explosion Hazards:	None.
Extinguishing Media:	Not pertinent.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and goggles. Contain any liquid runoff.

SECTION 6. SPILLS AND LEAKS

- Containment:** Prevent spillage from entering drinking water supply/streams.
- Clean Up:** Collect liquid or absorb onto absorbent material and package for disposal.
- Evacuation:** Not necessary.



SECTION 7. STORAGE AND HANDLING

- Storage:** Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 400F. Do not store in contact with brass. Do not store near food or foods. Do not stack pallets more than two (2) high.
- Transfer Equipment:** Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc. Due to product weight and density plastic drums of high quality or designed for dangerous goods are recommended.
- Work/Hygienic Practices:** Avoid contact with eyes, skin and clothing.
Keep out of reach of children.
Avoid inhalation of spray mists.
Wash thoroughly with water after handling.

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

- Eyes:** Chemical dust/splash goggles or full-face shield to prevent eye contact.
As a general rule, do not wear contact lenses when handling.
- Skin:** Impervious gloves and clothes.
- Respiratory:** Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH approved dust/mist respirator (such as 3M #871 0).
- Ventilation:** Recommended but no TLV established.

SECTION 9. PHYSICAL AND CHEMICAL DATA

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|-------------------------|------------------------------|
| Appearance: | Dark brown, viscous liquid. |
| Odor: | Slight sweet smell of sugars |
| pH: | 5.9 |
| Vapor Pressure: | 760 mm Hg. |
| Vapor Density (Air = 1) | 1.0 |
| Boiling Point: | <110 C |
| Freezing Point: | >0 C. |
| Water Solubility: | Completely miscible. |
| Specific Gravity: | 1.25. |
| Evaporation Rate: | Same as water. |
| Viscosity: | Not available. |
| % Volatile: | About 50% [water]. |

- Octanol/Water Partition Coefficient: Not available.
Saturated Vapor Concentration: Not available.



SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable.
Conditions To Avoid:	None known.
Incompatibility:	Contact with brass or strong oxidizing agents.
Hazardous Decomposition Products:	Thermal degradation at high temperatures above 500C may produce carbon and sulphur oxides.
Hazardous Polymerization:	Will not occur.

SECTION 11. POTENTIAL HEALTH EFFECTS

Acute Effects:

Eyes:	Mild irritant. May cause redness.
Skin:	Mild irritant, especially from prolonged exposure. May cause redness.
Ingestion:	May cause stomach cramps and/or nausea.
Inhalation:	None expected but inhalation of aerosol mist may cause mild irritation of nasal mucous membranes.

Subchronic Effects: None known.

Chronic Effects: None known.

SECTION 12. ECOLOGICAL INFORMATION

Algal/Lemna Growth Inhibition:	Has been used to improve carotene production in Dunliella salina [15% increased b-carotene production with 30 ppm dose]
Toxicity to Fish and Invertebrates:	Not known.
Toxicity to Plants:	Used to promote plant growth.
Toxicity in Birds:	Not known.

SECTION 13. DISPOSAL

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents according to state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.



SECTION 14. TRANSPORTATION

D.O.T.: Not D.O.T. Regulated.
Other Shipping Description: Fertilizing Compounds (Manufactured), Liquid.
NMFC Item 68140 Sub 6, LTL Class 70

SECTION 15. REGULATORY INFORMATION

CERCLA: Cobalt sulfate, copper sulfate, iron sulfate and zinc sulfate are listed as priority pollutants under the Clean Water Act and, as such, fall under the CERCLA spill reporting requirements of 40 CFR 302.

SARA TITLE Iii, Section 313 Toxic Chemicals:

Cobalt compounds (<0.01%), Copper compounds (<0.04%),
Zinc compounds (<0.07%).

SECTION 16. OTHER

All information appearing in this document was based on data provided by third party sources.

The information is believed to be accurate as of the preparation date, but is not warranted as being the final authority in the use of this product. This information does not purport to be legal or medical advice.

The information in the MSDS relates to this specific material. If the product is used as a component in any other product, this MSDS may not be valid. The information contained was obtained from sources which we believe are reliable. The information is provided without any warranty, expressed or implied, regarding its correctness.

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