



Material Safety Data Sheet (MSDS)

South Antarctic Krill Meal *Euphausia superba*

Prepared by Coast Continental Milling Inc.

Version November, 2015



COAST CONTINENTAL MILLING INC.

SECTION 1- PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name South Antarctic Krill Meal (*Euphausia superba*)
Synonyms Dried Krill Meal
Chemical family Feed
Use Feed ingredient
Supplier Coast Continental Milling Inc.
936 St. Andrews Ave.
North Vancouver, BC
V7L 4V2

Information and Emergency

Phone: 604.729.9351
Email: info@coastcontinental.com

SECTION 2- COMPOSITION – INFORMATION ON INGREDIENTS

OTHER 6-ethoxy-1,2 dihydro-2,2,4 trimethyl quinoline (CAS Reg.Nbr 91-53-2) is eventually added to retard oxidation (also known as Ethoxyquin). Alternative retardant of oxidation are natural antioxidants such as, but not limited to

1. Naturox liquid composed of mono and diglycerides, natural mixed tocopherols, citric acid and rosemary extract
2. Termox BCP liquid composed of BHA, propyl gallate and citric acid
3. Termox liquid FG which is a mixture of BHT and BHA

Hazard Symbols IMO9 or IMO4.2 Transportation symbols
RISK PHRASES Not Listed

SECTION 3- HAZARDS IDENTIFICATION

Appearance: Reddish and/or pinkish solid powder.

Potential Health Effect: Individuals with allergies/sensitivities to crustaceans might experience irritation, eye and nose congestion and slight difficulty in breathing.

Primary Routes of Entry: Inhalation/ Ingestion.

Skin:

Ingestion: This material is a slightly sweet, powder-form solid material.

Inhalation: Exposure to high airborne concentration may cause mild respiratory irritation.



SECTION 4- FIRST AID MEASURES

No special treatment under ordinary circumstances. Use good personal hygiene and wash thoroughly with soap and water after handling.

If redness or irritation develops, contact a physician.

Eyes:	Flush eyes with plenty of fresh water.
Skin:	No special treatment under normal circumstances. Flush skin with plenty of fresh water.
Ingestion:	No special treatment under normal circumstances.
Inhalation:	No special treatment under normal circumstances. Remove from exposure and move to fresh air immediately.
Notes to Physician:	Dried krill meal, made from whole raw krill, is not intended for human consumption based on extensive toxicological studies related to fluoride content in food intended for human consumption.

SECTION 5-FIRE FIGHTING MEASURES

Flammability	Nil at ambient temperature
Extinguishing media	CO2, dry foam
Flash point	NA
Explosive properties	NA
Hazardous combustion product	None.

Appropriate measures should be employed to minimize the potential for dust concentrations.



SECTION 6- ACCIDENTAL RELEASE MEASURES

Spillage Sweep or vacuum up, then dispose.
Environmental precautions Avoid disposal into drains.

Avoid creating conditions that will contribute to high concentrations of krill meal dust.
Carefully sweep or vacuum up into waste container.

SECTION 7- HANDLING AND STORAGE

Handling:

Avoid creating dusty conditions. While no special respiratory protection is required, a dust mask, gloves and other good industrial hygiene practices to minimize worker exposure will result in a more comfortable work environment.

Storage:

Store in a cool dry area in manufacturer's supplied packaging.

Temperature should be monitored and if it rises above 35°C (or greater than 5°C above ambient temperature, whichever is greater), provisions must be made for moving or cooling the product. Keep the product dry, away from direct sunlight and well ventilated.

Alternatively, use reefer storage condition in which case cold storage should at all times prevent moisture damage

SECTION 8- EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

It is recommended that all dust control equipment and material transport systems involved are engineered in such a way so to prevent conditions contributing to dust explosions.

Local exhaust
Dust mask, if allergic
Gloves, if allergic
Goggles



SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Appearance	Powder
Color	Pinkish, Reddish, Red-Pink, Brownish-reddish
Odor	Light shrimp, light sweet

SECTION 10-STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of temperature and pressure.

Conditions to Avoid: Avoid prolonged storage at elevated temperatures, direct light exposure and high moisture environments

Incompatible Materials: None

Stability: Product is stable

Materials to Avoid: Oxidants

SECTION 11-TOXICOLOGICAL INFORMATION

Acute Studies: Material is a non-toxic feed additive
No mortality at the highest tested doses.

Eye	If product enters eye it may cause slight irritation
Skin	Not expected to be a skin irritant
Inhaled	Inhalation of dust during process may cause irritation to sensitive people



SECTION 12-ECOLOGICAL INFORMATION

Dried aqua-grade krill meal is biodegradable and poses no risk to the environment. Dried krill meal and its breakdown products are non-toxic to plant and animal life, and do not accumulate in plant or animal tissue.

Ecotoxicity	No information available
Persistence	No information available
Mobility	No information available
Environmental fate	No information available
Bioaccumulative	No information available

SECTION 13-DISPOSAL CONSIDERATIONS

The product should be disposed off in suitable waste containers and treated as a solid waste.

Dispose in accordance with federal, state and local regulations.

SECTION 14-TRANSPORT INFORMATION

Following precautions are to be taken during transportation, storage and handling:

- Keep original packaging container dry
- Keep transportation containers dry
- Keep container in a well ventilated place
- Keep away from strong oxidizing agents and strong acids
- Keep away from heat
- This material and its packaging material must be disposed of in a safe way
- Keep temperature not exceeding 35° or 5°C above the ambient temperature; whichever is higher, at time of the shipment
- When using reefer containers and/or cold storage prevent excess moisture conditions



SECTION 15-OTHER INFORMATION

Disclaimer

Information for this Material Safety Data Sheet was obtained by sources and considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond full control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied. The supplier will not be liable to any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Center for Occupational Health and Safety (CCOHS) in Hamilton, Ontario, 905.572.4400 or the CSST in Montreal, Quebec, 514.873.3390.