

SAFETY DATA SHEET

CARRAGEENAN

Date Issued: 07/08/14

Synonyms: Carrageenin, Chondrus Extract, Processed Eucheuma Seaweed, PES

This SDS has been prepared to conform to the requirements of REACH Annex II Regulation 1272/2008/EC

1. IDENTIFICATION OF THE PRODUCT AND OF THE SUPPLIER

Product Name: Carrageenan MBF-202

Product Type: Carrageenan with NaCl

Product Class: Water-soluble seaweed extract

Chemical Name: Sulfated Polygalactose

General Use: Food Thickener, Gelling agent, Stabilizer

SUPPLIER: Ingredients Solutions Inc.

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2. HAZARD IDENTIFICATION

Product is **not** classified as dangerous according to EC Directive 67/548/EEC or 1999/45/EC.

Product is a safe food additive according to USFDA 21 CFR and Directive 2009/10/EC

Potential Hazards

Eye/Skin Irritant: Airborne powder (dust) is an eye and skin irritant if dust is allowed to accumulate.

Inhaling Hazard: Airborne powder at high concentration is a throat irritant

Explosive Hazard: Airborne powder (dust) can form an explosive hazard in air if dust is allowed to accumulate.

Slipping Hazard: In presence of water, powder on the floor can become a slipping hazard

Swallowing Hazard: Accidental ingestion can cause choking and breathing difficulty.

3. COMPOSITION OF PRODUCT

	<u>CAS #</u>	<u>EC Number</u>	<u>Food Additive E-number</u>
Carrageenan	9000-07-1	232-524-2	E-407
Sodium Chloride	7447-40-7	231-598-3	None assigned

4. FIRST AID MEASURES

After Eye Contact: Rinse with water for at least 5 minutes.

After Skin Contact: Wash well with soap and water and rinse with fresh water for at least 5 minutes

After Inhaling: Allow the victim to rest in a well-ventilated area; seek medical attention if breathing problems are observed.

After Swallowing: Drink plenty of water. Seek medical assistance if discomfort persists. There is no significant prolonged health hazard. The ingredient is generally recognized as safe to consume:
LD-50 = 5650 mg/kg (Rat) RTECS (1986)

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use carbon dioxide or dry chemical for small fires and use aqueous foam or water for large fires.

Unusual Fire & Explosion Hazards:

Dust may be explosive if mixed with air in critical proportions and in the presence of an ignition source. Good housekeeping procedures are required to reduce this potential hazard.

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and complete personal protective when entering confined areas where potential for exposure to vapors or products of combustion exists. Products of combustion include but are not limited to carbon dioxide, carbon monoxide and sulfuric acid.

6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled:

For wet material, dike spill, absorb with inert material, and collect by aspiration for disposal. Caution, wet material is slippery. For dry powder, sweep or scoop up and collect for disposal. Avoid creating dust clouds and breathing dust.

Waste Disposal: Refer to Section 13 for method of disposal.

7. HANDLING AND STORAGE

Handling: Handle in an open and well ventilated area to control exposure to dust. Always use safe lifting when manually moving containers (bags or drums) weighing more than 50 pounds (22.7 kg).

Storage: Store in tight containers in a clean, cool, dry place. Avoid excessive heat or humidity to avoid deterioration of product quality.

8. PERSONAL PROTECTION

Eye Protection: In dusty areas safety goggles should be worn

Skin Protection: Gloves should be worn for hand protection

Respiratory Protection: ACGIH TLV not known. In very dusty areas NIOSH or EU CEN approved dust masks or respirators should be worn.

Protective Clothing: None required

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to tan fine powder

Odor: Slight seaweed

Odor Threshold: N/A

pH (1.0% aqueous solution): 8 to 11

Melting Point/Freezing Point: N/A

Initial Boiling Point / Boiling Range: N/A

Powder Flash Point (Setaflash): >90°C

Evaporation Rate: N/A

Flammability (solid gas): N/A

Upper/Lower Flammability or Explosive Limits: See section 5

Vapor Pressure: N/A

Vapor Density: N/A

Relative Density: N/A

Solubility in Water: Insoluble in cold water; completely soluble at 70°C; gels on cooling

Partition Co-Efficient: n-octano/water: N/A

Auto Ignition Temperature: N/A
Decomposition Temperature: 110-120
Viscosity (1.5% in water; 70°C): 5 cps minimum
Powder density: 0.5 to 0.8 g/cm²

10. STABILITY AND REACTIVITY

Chemical Stability: This product is stable under normal conditions of use.

Conditions to Avoid: To avoid dust explosions powder density in work area must be kept below 0.1 g/l.

Materials to Avoid: Contact with strong acids or strong oxidizers.

Hazardous Decomposition: Possibility of sulfur oxides being released on combustion.

11. TOXICOLOGICAL INFORMATION

Eye Effects: Non-irritating to rabbit..

Skin Effects: Non-irritating to rabbit

Dermal LD₅₀ : >2,000 mg/kg for rabbit

Oral LD₅₀ : >5,000 mg/kg for rat

Inhalation LC₅₀ : 0.93 mg/l (4hr) for rat

Sensitization: Non-sensitizing to guinea pig skin

Mutagenicity: Not mutagenic (reverse mutation

Carcinogenicity: Not carcinogenic (JECFA toxicology monograph 1999)
Salmonella typhimurium strains

12. ECOLOGICAL INFORMATION

Avoid release of the product into the environment through good workplace practices. Product is a natural polysaccharide from certain seaweed species and is biodegradable.

13. DISPOSAL CONSIDERATIONS

Product: Recycle product if practical; otherwise dispose in compliance with local, national or international regulations currently in force.

Packaging: Recycle empty containers or packaging material if practical; otherwise dispose in compliance with local procedures.

To minimize exposure: See Section 8 (*Exposure Controls/Personal Protection*)

14. TRANSPORT INFORMATION

The product is not listed as a dangerous or hazardous material by national or international agencies controlling transportation by truck, rail, marine or air transport

(DOT, IMDG, ADR, ICAO, IATA or TDG), and is therefore not regulated by these agencies.

15. REGULATORY INFORMATION

The product is a food additive controlled in the USA under 21CFR172.620. In the EU it is listed as a food additive under EC Directive 2009/10/EC (E-407; E-407a).

The product is not considered dangerous in the EU according to EC Directives 67/548/EEC and 1999/45/EC.

The product is not considered dangerous in Canada in accordance with WHMIS

The product is not considered dangerous or hazardous in the USA according to SARA Title III Sections 311-313, CERCLA or TSCA.

The product is manufactured in accordance with GMP (USA) and EU Regulation 178/2002/EC.

16. OTHER INFORMATION

The USA National Fire Protection Association classifies the product as Health 1, Fire Hazard 1 and Reactivity 0.

This SDS is a revision of the 01/07/09 version. Date of Revision 07/08/14

To the best of our knowledge, the information contained herein is accurate. However, no liability whatsoever is assumed for the accuracy or completeness of the information obtained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.