Product Identification

Product Name: XANTHAN GUM
Synonyms: Polysaccharide B-1459; Keltrol F
Chemical Formula: Not defined
Formula Weight: NA
Chemical Family: Polysaccharide gum
Integra Product Numbers: X201.30; X201.31

Hazard Overview

HMIS Rating: 0-1-0-B  NFPA Rating: NE
Warning Label:

Caution.
Use safe chemical handling practices. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Components

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthan gum</td>
<td>11138-66-2</td>
<td>100</td>
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</tbody>
</table>

Physical Data

Boiling Point: NA
Melting Point: NA
Vapor Pressure: NA
Specific Gravity: NA
Evaporation Rate: NA
Vapor Density: NA
Air = 1

Solubility:
Appreciably soluble (>10%) in water.

Appearance and Odor:
Cream colored, free-flowing powder. No odor.

Fire and Explosion Data

Flash Point: NA
Auto-ignition Temperature: NA
Flammable Limits (% by volume in air): Upper: NA, Lower: NA

Fire Extinguishing Media:
Use extinguishing media appropriate for surrounding fire.

Special Firefighting Procedures:
Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Unusual Fire and Explosion Hazards:
As with most organic solids, combustion is possible at elevated temperatures.

Health Hazard Information

Effects of Overexposure

Skin Contact: None Identified
Eye Contact:
XANTHAN GUM
MATERIAL SAFETY DATA SHEET

INTEGRA Chemical Company
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)

MSDS Number: X201
Revision Date: 16-Apr-08
Revision No.: 004

Pages: 2

Health Hazard Information

Eye Contact: None Identified
Ingestion: None Identified
Inhalation: None Identified
Chronic Effects of Overexposure: None Identified

Exposure Limits:

<table>
<thead>
<tr>
<th>Component</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
</tr>
</thead>
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OSHA PEL

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</tr>
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</table>

ACGIH TLV

Toxicity Data:

Xanthan gum No information available

Medical Conditions Generally Aggravated by Exposure:

None Identified

Target Organs:

None Identified

Reproductive Effects:

None Identified

Carcinogenicity:

None Identified

Component NTP Listing IARC Listing OSHA Regulated
Xanthan gum No listing No listing

Emergency First Aid Procedures

Skin Contact:
Wash with soap and water. Seek medical attention if irritation develops.

Eye Contact:
Flush eyes with water. If irritation persists, seek medical attention.

Inhalation:
Remove to fresh air.

Ingestion:
Do not induce vomiting. If adverse symptoms develop, seek medical attention.

Additional First Aid and Treatment Notes:
No information available

Reactivity Data

Stability: Stable
Reactivity Data

Hazardous Polymerization: Will Not Occur
Incompatibles:
   Incompatible with strong oxidizers.
Decomposition Products:
   Oxides of carbon (CO, CO2)
Conditions to Avoid:
   Excessive dusting, especially in the presence of ignition sources.

Spill and Disposal Procedures

Spill and Leak Procedures:
   Remove all ignition sources. Sweep or scoop into disposal container in a manner that minimizes dust dispersion. Wear suitable protective equipment.
Disposal Procedures:
   Dispose in accordance with all Local, State and Federal regulations.

Protective Equipment

Ventilation:
   Use adequate general or local exhaust ventilation to keep fume and/or dust levels as low as possible.
Respiratory Protection:
   None needed unless use generates annoying or irritating dusts, mists or vapors. Use a dust/mist respirator mask if necessary.
Skin and Eye Protective Equipment:
   Safety glasses. Use good chemical handling practices.

Storage and Handling Precautions

Storage Area: GENERAL
   Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Protect containers from physical damage.

Transportation Information

☐ Regulated Material domestic ground transportation
   (reference: CFR Title 49, Transportation)
   Proper Shipping Name:
   UN or NA Identification number: Hazard Class and Label:
   Packing Group: Subsidiary Risk and Label:

☐ Regulated Material via Air Transportation
   (reference: ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air)
   Proper Shipping Name:
   UN Identification Number: Hazard Class and Label:
   Packing Group: Subsidiary Risk and Label:
XANTHAN GUM

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Transportation Information

Packing Instruction Max net qty per package
Passenger Aircraft: Cargo Aircraft:

Regulatory Information

Component TSCA CERCLA SARA EHS SARA 313 Toxic Release
Xanthan gum ✔ Inventory RQ TPQ lbs de minimus

SARA Hazard Categories: Acute Chronic Flammability Pressure Reactivity
Xanthan gum

Clean Air Act Categories: SOCMI HAP Volatile HAP Organic HAP Ozone Depleting
Xanthan gum

MSDS Revision History:
002 - Changed header phone number
003 - Format revisions; updated header phone number
004 - Updated Header Information; Updated Product Identification

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***** END OF MSDS *****