



KIC Chemicals, Inc.  
87 South Ohioville Road  
New Paltz, NY 12561 USA  
Phone: 845-883-5306 Fax: 845-883-5326  
<http://www.kicgroup.com>

## XANTHAN GUM SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION

**Product Identifier:**

**Substance Name:** Xanthan Gum  
**Synonyms:** Xanthan, xanthane gum, corn sugar gum; gummi xanthanum  
**Chemical Formula:** (C<sub>35</sub>H<sub>49</sub>O<sub>29</sub>)<sub>n</sub>  
**Product Type:** Polymer  
**CAS Number:** 11138-66-2  
**EC Number:** 234-394-2

**Recommended uses & restrictions on use:**

**Identified Uses:** Food additive, cosmetic and household products, paints and coatings, thickening agent  
**Uses advised against:** None Listed

**Supplier name:**

KIC Chemicals, Inc.  
87 South Ohioville Road  
New Paltz, NY 12561 USA  
Phone: 845-883-5306 Fax: 845-883-5326  
<http://www.kicgroup.com>  
**E-mail address of person responsible for this SDS:** QC@kicgroup.com

**Emergency Telephone #:** 800-424-9300 CHEMTREC

### SECTION 2: HAZARDS IDENTIFICATION

**GHS Classification of Substance in accordance to Regulation (EC) No. 1272/2008 (CLP/GHS):** Combustible dust  
May form combustible dust concentrations in air.

**GHS Label Elements:** None

**Other Hazards:**

**Eye:** Dust may cause mechanical irritation.  
**Skin:** Dust may cause mechanical irritation. Low hazard for usual industrial handling.  
**Ingestion:** No hazard expected in normal industrial use.  
**Inhalation:** Inhalation of dust may cause respiratory tract irritation.  
**Chronic:** No information found.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Substance:** Xanthan Gum

**Chemical identity:** (C<sub>35</sub>H<sub>49</sub>O<sub>29</sub>)<sub>n</sub>

**Common name/Synonyms:** Xanthan, xanthane gum, corn sugar gum; gummi xanthanum

Ingredient name	CAS number	EC number	%	EU Classification	GHS Classification
Xanthan Gum	11138-66-2	234-394-2	100	Not Classified	Combustible dust

**Impurities and Stabilizing Additives**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

## SECTION 4: FIRST AID MEASURES

### Description of First Aid Measures

**General Advice:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Take care to self-protect by avoiding becoming contaminated.

**Most Important Symptoms and Effects, Both Acute and Delayed:** See Hazard Statements in section 2.

### Description of First Aid Measures

**After inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**After skin contact:** Wash thoroughly with mild soap or detergent.

**After eye contact:** Immediately flush with large amount of running water for at least 15 minutes. If irritation develops, seek medical attention.

**After ingestion:** No emergency action anticipated.

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

**Suitable extinguishing media:** Use water spray, carbon dioxide, dry chemical or foam. Cool containers exposed to flame with water spray.

**Unsuitable extinguishing media:** Do not use a heavy water jet.

### Special Hazards Arising from the Substance or Mixture

Can burn if strongly heated. Dusts may form explosive mixtures with air. During a fire, irritating/toxic gases and fumes may be generated, including carbon oxides. Under certain conditions, a dust cloud may explode when ignited by spark or flame.

### Advice for Firefighters

**Firefighting instructions:** Exercise caution when fighting any chemical fire.

**Protection during firefighting:** Firefighters should wear full protective gear. Do not enter fire area without proper protective equipment, including respiratory protection.

**Other Information:** Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Protective equipment:** Use appropriate personal protection equipment (PPE).

**Emergency procedures:** Evacuate unnecessary personnel. Ventilate area.

**Environmental Precautions:** Prevent entry to sewers and public waters.

### Methods and Material for Containment and Cleanup

Vacuum or sweep up material and place into a suitable disposal container. Forms smooth, slippery surfaces on floors, posing an accident risk. Avoid generating dusty conditions. Provide ventilation.

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Prevention of user exposure:** Put on appropriate personal protective equipment and do not breathe dust.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Remove soiled clothing and laundry before reuse. Avoid all skin contact with spilled material. Areas in which this is used should be wiped down periodically to avoid accumulation.

**Prevention of fire and explosion:** Avoid contact with heat and ignition sources and with strong oxidizing agents.

**Precautions while moving the product:** Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

**Hygiene Measures:** Workers should wash hands and face before eating, drinking and smoking.

### Conditions for Safe Storage, Including any Incompatibilities

**Storage precautions:** Ambient storage temperature. Atmospheric storage pressure. Store in cool, dry area. Keep containers closed and protect from damage. Empty containers retain product vapors and residue. Observe all label precautions even after container is emptied. Do not cut, grind or weld on or near these containers. Do not reuse containers unless thoroughly cleaned.

**Incompatible products:** Avoid contact with strong oxidizing agents.

**Packaging materials:** Recommended: Use original container.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

**Occupational Exposure Limits:** ACGIH, OSHA and NIOSH have not developed exposure limits for this product.

The following exposure limits are for Particulates Not Otherwise Classified (PNOC):

#### OSHA

15 mg/m<sup>3</sup> TWA (total dust)

5 mg/m<sup>3</sup> TWA (respirable fraction)

#### DFG MAKs

4 mg/m<sup>3</sup> TWA (total dust)

1.5 mg/m<sup>3</sup> TWA (respirable fraction)

### Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

### Individual Protection Measures

**Personal Protective Equipment:** Goggles, Gloves, Protective Clothing, Apron, Dust Mask



**Eye Protection:** Chemical safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Hand Protection:** Handle with impervious gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Skin and Body Protection:** Wear protective clothing and apron.

**Materials for Protective Clothing:** Corrosion-proof clothing.

**Respiratory Protection:** Respiratory protection is not required where adequate ventilation exists. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environmental Exposure Controls:** No special environmental precautions required.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### General Information

Physical State: Solid (powder)

Color: White to light yellow

Odor: Slight organic

Molecular Weight: 10<sup>6</sup>

### Safety Data

pH: 6.0 - 8.0 (1% solution)

Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): May form combustible dust concentrations in air

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density: No data available

Solubility(ies): Soluble in water

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: > 200°C

Decomposition temperature: No data available

Viscosity: 1200 - 1800 cps @ 25°C

Melting point/freezing point: No data available

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Heat, moisture

**Incompatible materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Thermal oxidative decomposition of Xanthan Gum can produce carbon dioxide or carbon monoxide.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Acute toxicity by oral route, inhalation and dermal route:

Product	Test	Species	Dose
Xanthan Gum	LD <sub>50</sub> , Oral	Rat	45,000 mg/kg bw

**Skin irritation / corrosion:** Prolonged contact may be irritating.

**Eye irritation:** Dust may be irritating to eyes.

**Skin sensitization:** No data available.

### CMR Effects

**Mutagenicity:** No data available.

#### Carcinogenicity:

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available.

**Developmental toxicity:** No data available.

**Repeated dose toxicity - Oral route:** No data available.

**Toxicokinetics:** No data available.

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity (aquatic and terrestrial, where available)

Product	Toxicity to fish	Toxicity to crustaceans	Toxicity to algae/terrestrial plants
Xanthan Gum	LC <sub>50</sub> / 96H: 320-560 mg/l <i>Oncorhynchus mykiss</i> (rainbow trout)	No data available	No data available

**Persistence and Degradability:** Biodegrades rapidly: >98% after 2 days.

Biochemical oxygen demand within 5 days= 250 mg O<sub>2</sub>/g.

**Bioaccumulative Potential:** No data available.

**Mobility in the Soil:** Completely soluble.

**Other Adverse Effects:** No data available.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Methods of Disposal of Waste Residue

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Disposal of Contaminated Packaging

Dispose of as unused product.

## SECTION 14: TRANSPORT INFORMATION

**UN number:** Not regulated as a hazardous material.

**DOT (US):** Not dangerous goods.

**IMDG:** Not dangerous goods; not a marine pollutant.

**IATA:** Not dangerous goods.

*Note: While this is not currently a regulated product, one should observe the usual precautionary measures for transporting chemical cargo.*

## SECTION 15: REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** No SARA Hazards

**Massachusetts Right To Know Components:** No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

Xanthan Gum

CAS-No. 11138-66-2

#### New Jersey Right To Know Components

Xanthan Gum  
CAS-No. 11138-66-2

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**SECTION 16: OTHER INFORMATION**

**HMIS Rating**

Health hazard: 0  
Chronic Health Hazard:  
Flammability: 0  
Physical Hazard 0

**NFPA Rating**

Health hazard: 0  
Fire Hazard: 0  
Reactivity Hazard: 0

**Training advice:** Before using/handling the product one must read carefully present SDS.

**Revision Date:**

1.0 – Initial Release (EMK), 18MAY2015

**Disclaimer:**

*To the best of our knowledge the information contained herein is accurate. However, neither KIC Chemicals, Inc., nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.*

*Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*