

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Xanthan Gum
Substance name : Xanthan Gum
Molecular formula : (C35-H49-O29)_n
CAS-No. : 11138-66-2
Chemical nature : Solid

Manufacturer or supplier's details

Company : Jungbunzlauer Inc.
7 Wells Avenue
Newton Centre, Massachusetts 02459
USA
www.jungbunzlauer.com

Telephone : +1 617 969-0900
Telefax : +1 617 964-2921
E-mail address : msds@jungbunzlauer.com
Responsible/issuing person

Emergency telephone : CHEMTREC
number : +1 800 424 9300

Recommended use of the chemical and restrictions on use

Recommended use : Food/ feedstuff additives, Cosmetic additive, Medical aids,
Industrial use

Restrictions on use : None known.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture according to GHS.

GHS-Labeling - Label elements

No GHS label elements required.

Hazards Not Otherwise Classified

May form combustible dust concentrations in air (during processing).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

No ingredients are hazardous according to OSHA criteria.

SECTION 4. FIRST AID MEASURES**First aid procedures**

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

- Protection of first-aiders : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.
- In case of skin contact : Immediately flush skin with large amounts of water.
- In case of eye contact : If easy to do, remove contact lens, if worn.
Immediately flush eye(s) with plenty of water.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.

Notes to physician

- Symptoms : No information available.
- Risks : None known.
- Treatment : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES**Fire fighting**

- Suitable extinguishing media : Water spray
Dry powder
Foam
Carbon dioxide (CO₂)
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
In the event of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for firefighters

- Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.
Exposure to decomposition products may be a hazard to health.
Hazardous decomposition products formed under fire conditions.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
Wear fire resistant or flame retardant clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid dust formation.
Avoid breathing dust.
Ensure adequate ventilation, especially in confined areas.
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

No special environmental precautions required.

Methods and materials for containment and cleaning up : Use mechanical handling equipment.
Keep in suitable, closed containers for disposal.
Clean contaminated surface thoroughly.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE**Handling**

Advice on safe handling : Risk of dust explosion.
Avoid creating dust.
May form combustible dust concentrations in air (during processing).
Do not breathe dust.
Avoid contact with skin and eyes.
Wear personal protective equipment.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.
To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

Dust explosion class : St1

Storage

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.
Take measures to prevent the build up of electrostatic charge.

Further information on storage conditions : Avoid moisture.
Do not store at temperatures above 30 °C / 86 °F.

Advice on common storage : No special restrictions on storage with other products.

Other data : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Engineering measures : Provide adequate ventilation.

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
Use NIOSH approved respiratory protection.

Hand protection
Remarks : Choose gloves to protect hands against chemicals depending

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Eye protection : Safety glasses

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and immediately after handling the product.
Remove contaminated clothing and protective equipment before entering eating areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : off-white, beige

Odour : characteristic

Odour Threshold : not determined

pH : 6 - 8, (25 °C)

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Flammable solid

Bulk density : 500 - 700 kg/m³ (ca.)

Solubility(ies)

Water solubility : completely soluble

Solubility in other solvents : insoluble, dispersible
Solvent: Alcohol

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

Ignition temperature : No data available

Thermal decomposition : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under normal conditions.

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

Possibility of hazardous reactions	: None known.
Conditions to avoid	: Avoid dust formation.
Incompatible materials	: No data available
Hazardous decomposition products	: Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Components:****Xanthan Gum:**

Acute oral toxicity	: LD50 Oral Rat: 45,000 mg/kg LD50 Oral Mouse: 20,000 mg/kg
Acute inhalation toxicity	: Rat: 21 mg/l Exposure time: 1 h Assessment: The substance or mixture has no acute inhalation toxicity Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
Acute dermal toxicity	: Remarks: No skin irritation

Skin corrosion/irritation**Components:****Xanthan Gum:**

: Species: Rat Exposure time: 360 h Result: No skin irritation Remarks: No skin irritation
Species: Rabbit Exposure time: 120 h Result: No skin irritation Remarks: No skin irritation

Serious eye damage/eye irritation**Components:****Xanthan Gum:**

: Species: Rat Exposure time: 120 h Result: No eye irritation Remarks: No eye irritation

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

Respiratory or skin sensitisation**Components:****Xanthan Gum:**

- : Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.
Remarks: No known sensitising effect.

Germ cell mutagenicity**Components:****Xanthan Gum:**Germ cell mutagenicity-
Assessment

- : Animal testing did not show any mutagenic effects.

Carcinogenicity**Components:****Xanthan Gum:**Carcinogenicity -
Assessment

- : Not classifiable as a human carcinogen., Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

Reproductive toxicity**Components:****Xanthan Gum:**

Effects on fertility

- : Species: Rat
Dose: 0.5 g/kg/d

Remarks: Fertility and developmental toxicity tests did not reveal any effect on reproduction.

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity**Components:****Xanthan Gum:**

- : Rat: < 1000 mg/kg
Application Route: Oral
Exposure time: 24 h
Remarks: No adverse effect has been observed in chronic toxicity tests.

Repeated dose toxicity -
Assessment

- : No adverse effect has been observed in chronic toxicity tests.

Aspiration toxicity**Components:****Xanthan Gum:**

- : No aspiration toxicity classification

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

Potential Health Effects

Aggravated Medical Condition : None known.
Symptoms of Overexposure : No information available.

Experience with human exposure

Inhalation : Respiratory system
No information available.

Skin contact : Skin
No information available.

Eye contact : Eyes
No information available.

Ingestion : Digestive organs
No information available.

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.

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.

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.

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.

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

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish :
Remarks: No adverse effect has been observed in acute toxicity tests.

Components:**Xanthan Gum :**

Toxicity to fish : (Oncorhynchus mykiss (rainbow trout)): 420 mg/l
Exposure time: 96 h

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

Persistence and degradability**Components:****Xanthan Gum :**

Biodegradability	: Biodegradation: 78 % Exposure time: 28 d Method: OECD Test Guideline 301F Remarks: Readily biodegradable
Biochemical Oxygen Demand (BOD)	: Biochemical oxygen demand within 5 days 200 mg/g

Bioaccumulative potential**Product:**

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

Components:**Xanthan Gum :**

Bioaccumulation	: Remarks: The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.
-----------------	---

Mobility in soil**Components:****Xanthan Gum :**

Distribution among environmental compartments	: Remarks: No data available
---	------------------------------

Other adverse effects**Components:****Xanthan Gum :**

Results of PBT and vPvB assessment	: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Additional ecological information	: This product has no known ecotoxicological effects.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues	: Where possible recycling is preferred to disposal or incineration. Can be landfilled or incinerated, when in compliance with local regulations.
Contaminated packaging	: Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

Xanthan Gum

Version 1.0

Revision Date 05/28/2015

Print Date 05/28/2015

DOT

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

SECTION 15. REGULATORY INFORMATION**SARA 311/312 Hazards** : No SARA Hazards**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : 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.**California Prop 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.**The components of this product are reported in the following inventories:****REACH** This substance is exempt from registration according to Regulation (EC) No. 1907/2006 (REACH).**EINECS** On the inventory, or in compliance with the inventory**TSCA** On TSCA Inventory**DSL** All components of this product are on the Canadian DSL**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Date : 05/28/2015