

# SAFETY DATA SHEET



## Xanthan Gum

Version 1.1

Revision Date 27.01.2015

Neutron<sup>®</sup>Pharmachemical Co.  
Manufacturer of Laboratory Chemical & Pharmaceutical Materials

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name : Xanthan Gum  
Substance name : Xanthan Gum  
Molecular formula : (C35-H49-O29)<sub>n</sub>  
CAS-No. : 11138-66-2  
EC-No. : 234-394-2

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-stance/Mixture : Food/ feedstuff additives, Cosmetic additive, Medical aids, Industrial use

#### 1.3 Details of the supplier of the safety data sheet

Company : NEUTRON PHARMACHEMICAL CO 98, 9th Floor, Borjsaz Building, Azadi Ave, Tehran, Iran.  
Telephone 021-66581408  
Telefax 021-66906732-3  
E-mail address info@neutronco.com  
www.neutronco.com

#### 1.4 Emergency telephone number

Telephone 125

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

##### Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

The product does not need to be labelled in accordance with EC directives or respective national laws.

#### 2.3 Other hazards

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Additional advice:

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

### 3. Composition/information on ingredients

#### 3.1 Substances

Chemical nature : Solid

Substance name	CAS-No.	Concentration [%]
No dangerous ingredients according to Regulation (EC) No. 1907/2006 :		
Xanthan Gum	11138-66-2	<= 100

#### 3.2 Mixtures

### 4. First aid measures

#### 4.1 Description of first aid measures

General advice : Get medical advice/ attention if you feel unwell.  
Show this safety data sheet to the doctor in attendance.

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 : Drink water as a precaution.  
If swallowed, DO NOT induce vomiting.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

### 5. Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : Water spray  
Dry powder  
Foam  
Carbon dioxide (CO2)

Unsuitable extinguishing media : none

#### 5.2 Special hazards arising from the substance or mixture

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Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.  
Hazardous decomposition products formed under fire conditions.  
Exposure to decomposition products may be a hazard to health.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

Further information : Standard procedure for chemical fires.  
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.

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.  
Avoid breathing dust.  
Ensure adequate ventilation, especially in confined areas.

### 6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.  
Keep in suitable, closed containers for disposal.  
Clean contaminated surface thoroughly.

### 6.4 Reference to other sections

No conditions to be specially mentioned.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid creating dust.  
Do not breathe dust.  
Avoid contact with skin and eyes.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Dust explosion class : St1

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.

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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.

### 7.3 Specific end use(s)

## 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering measures

Provide adequate ventilation.

#### Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.  
Half mask with a particle filter P2 (EN 143)

Hand protection : Choose gloves to protect hands against chemicals depending 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 : Handle in accordance with good industrial hygiene and safety practice.  
General industrial hygiene practice.  
Do not breathe dust.  
Avoid contact with skin, eyes and clothing.

#### Environmental exposure controls

General advice : No special environmental precautions required.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : powder

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Colour	: off-white beige
Odour	: characteristic
Flash point	: Not applicable
Ignition temperature	: No data available
Flammability (solid, gas)	: does not ignite
Auto-ignition temperature	: > 200 °C
pH	: 6 - 8 at 25 °C
	: Decomposes without melting.
	: Not applicable
Bulk density	: 650 - 850 kg/m <sup>3</sup>
Water solubility	: completely soluble
Partition coefficient: n-octanol/water	: No data available
Solubility in other solvents	: Medium: Alcohol insoluble, dispersible
Evaporation rate	: Not applicable

### 9.2 Other information

## 10. Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Dust can form an explosive mixture in air.

### 10.4 Conditions to avoid

Conditions to avoid : Avoid dust formation.

### 10.5 Incompatible materials

Materials to avoid : Not applicable

### 10.6 Hazardous decomposition products

Hazardous decomposition : Build-up of dangerous/toxic fumes possible in cases of

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products fire/high temperature.

Thermal decomposition : No data available

### 11. Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

Acute oral toxicity

Xanthan Gum : LD50 Oral: 45.000 mg/kg  
Species: Rat

LD50 Oral: 20.000 mg/kg  
Species: Mouse

Acute inhalation toxicity

Xanthan Gum : 21 mg/l  
Exposure time: 1 h  
Species: Rat  
An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.

Acute dermal toxicity

Xanthan Gum : No skin irritation

##### Skin corrosion/irritation

Skin irritation

Xanthan Gum : Species: Rat  
Result: No skin irritation  
Exposure time: 360 h  
No skin irritation

Species: Rabbit  
Result: No skin irritation  
Exposure time: 120 h  
No skin irritation

##### Serious eye damage/eye irritation

Eye irritation

Xanthan Gum : Species: Rat  
Result: No eye irritation  
Exposure time: 120 h  
No eye irritation

##### Respiratory or skin sensitisation

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Sensitisation  
Xanthan Gum

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

### Germ cell mutagenicity

Assessment  
Xanthan Gum

: Animal testing did not show any mutagenic effects.

### Carcinogenicity

Assessment  
Xanthan Gum

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

### Reproductive toxicity

Xanthan Gum

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

### Target Organ Systemic Toxicant - Repeated exposure

Xanthan Gum

: Species: Rat  
Application Route: Oral  
Exposure time: 24 h  
No adverse effect has been observed in chronic toxicity tests.

### Aspiration hazard

Aspiration toxicity  
Xanthan Gum

: No aspiration toxicity classification

Repeated dose toxicity  
Xanthan Gum

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

## 12. Ecological information

### 12.1 Toxicity

Toxicity to fish

: No adverse effect has been observed in acute toxicity tests.

Toxicity to fish  
Xanthan Gum

: 420 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)

### 12.2 Persistence and degradability

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Biodegradability

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: 78 %

Exposure time: 28 d

Method: OECD Test Guideline 301F

Readily biodegradable

Biochemical Oxygen Demand (BOD)

Xanthan Gum

: 200 mg/g

### 12.3 Bioaccumulative potential

Bioaccumulation

Xanthan Gum

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

### 12.4 Mobility in soil

Distribution among environmental compartments

Xanthan Gum

: No data available

### 12.5 Results of PBT and vPvB assessment

Xanthan Gum

: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

### 12.6 Other adverse effects

Additional ecological information

Xanthan Gum

: This product has no known ecotoxicological effects.

## 13. Disposal considerations

### 13.1 Waste treatment methods

Product

: 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.

## 14. Transport information

**ADR**

Not dangerous goods

**IATA**

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Not dangerous goods

### IMDG

Not dangerous goods

### RID

Not dangerous goods

## 15. Regulatory information

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

Major Accident Hazard Leg- : 96/82/EC Update: 2003  
islation Directive 96/82/EC does not apply

### 15.2 Chemical Safety Assessment

## 16. Other 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.