

XANTHAN GUM

Bisley International LLC

Chemwatch: 14073
Version No: 6.1.4.8
Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Chemwatch Hazard Alert Code: 1

Issue Date: 17/08/2019
Print Date: 07/07/2021
S.GHS.USA.EN

SECTION 1 Identification

Product Identifier

Product name	XANTHAN GUM
Chemical Name	gum xanthan
Synonyms	xanthan gum; polysaccharide gum; xanthum; xanthem; xanthen; xanthum gum; Kelco Kelzan AR; Kelco Xanvis; Keltrol F, M, T, TF, BT, GM, RD, SF, 1000, PF300, K1B111; Kelco D, D35, M, MU, S, XC, XCD; Flocon 1035; Keltrol T; Rhodopol 23; Kelzan S; Xanvis; Actigum CX 9; Biozan R; Keltrol TF 1000; Kelzan XC; Monategum GS; Ekogum ketorol; Kelzan XCD; Kelzan AR; biopolymer 9702; xanthan Gum(food grade); xanthan gum NF, EP, JP; xanthan; Rhodopol R 23; xanthan gum food grade 80MESH; xanthan gum pharmaceutical grade 80MESH; xanthan gum; xanthan gum(food grade,oil drilling grade,etc); xanthan Gum,11138-66-2; Capryl mono glyceride(CMG); Xanthan Gum FCC4; San Ace; Echogum F; Echogum T; Rhodoflood XR 75; Keltrol RD; XC 85II-F4; Xanflood; Idvis; XB 23; Kelzan F; Kelzan MF; Kelzan M; Keltrol TF; Kelzan T; Shellflo XA; Satiaxane CX
Chemical formula	Not Available
Other means of identification	Not Available
CAS number	11138-66-2

Recommended use of the chemical and restrictions on use

Relevant identified uses	In foods, non-foods, and cosmetics as stabilizer and emulsifying agent.Used in chemically enhanced oil recovery. Polysaccharides obtained from bacteria or fungal sources, may accumulate inside the cells displaying storage function such as glycogen, may be present as structural components in the form of a slime layer as capsular polysaccharides or secreted outside the cells as extracellular bacterial polysaccharides or exopolysaccharides (EPS) e.g. xanthan, bacterial alginate, sphingon etc. Structurally related exopolysaccharides may or may not demonstrate a similar aqueous solubility profile, rheological behavior, thermostability and acid stability. Gel-forming polysaccharides have been found to be mostly water-insoluble producing thermostable gels. Non-gel forming polysaccharides may be water-soluble or water-insoluble. A common structural feature found in all non-gel forming exopolysaccharides is the presence of protective side chains preventing favourable interactions between solvent molecules and highly active functional groups like carboxylate groups.
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Bisley International LLC
Address	1790 Hughes Landing Boulevard Suite 400 The Woodlands TX 77380 United States
Telephone	+1 (844) 424 7539
Fax	Not Available
Website	www.bisley.biz
Email	compliance@bisley.biz

Emergency phone number

Association / Organisation	Bisley International LLC	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	+1 855 237 5573	+61 2 9186 1132
Other emergency telephone numbers	+61 2 9186 1132	+1 855-237-5573

Once connected and if the message is not in your preferred language then please dial 01

Una vez conectado y si el mensaje no está en su idioma preferido, por favor marque 02

SECTION 2 Hazard(s) identification

Classification of the substance or mixture

Not considered a Hazardous Substance by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Not classified as Dangerous Goods for transport purposes.

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification	Not Applicable
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Label elements

Hazard pictogram(s)	Not Applicable
Signal word	Not Applicable

Hazard statement(s)

Not Applicable

Hazard(s) not otherwise classified

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients**Substances**

CAS No	%[weight]	Name
11138-66-2	>99	<u>gum xanthan</u>

Mixtures

See section above for composition of Substances

SECTION 4 First-aid measures**Description of first aid measures**

Eye Contact	If this product comes in contact with eyes: <ul style="list-style-type: none"> ▶ Wash out immediately with water. ▶ If irritation continues, seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary.
Ingestion	<ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Fire-fighting measures**Extinguishing media**

- ▶ Water spray or fog.
- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Special protective equipment and precautions for fire-fighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions. ▶ Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions).

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- ▶ Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion.
- Combustion products include:
carbon monoxide (CO)
carbon dioxide (CO₂)
other pyrolysis products typical of burning organic material.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<p>Note: Very slippery when wet.</p> <ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid contact with skin and eyes. ▶ Wear impervious gloves and safety glasses. ▶ Use dry clean up procedures and avoid generating dust.
Major Spills	<ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Control personal contact with the substance, by using protective equipment and dust respirator. ▶ Prevent spillage from entering drains, sewers or water courses.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> ▶ Limit all unnecessary personal contact. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Avoid contact with incompatible materials. ▶ Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions) ▶ Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. ▶ Establish good housekeeping practices. ▶ Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.
Other information	<ul style="list-style-type: none"> ▶ Store in original containers. ▶ Keep containers securely sealed. ▶ Store in a cool, dry area protected from environmental extremes. ▶ Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ Lined metal can, lined metal pail/ can. ▶ Plastic pail. ▶ Polyliner drum. ▶ Packing as recommended by manufacturer.
Storage incompatibility	<p>Avoid contamination of water, foodstuffs, feed or seed.</p> <ul style="list-style-type: none"> ▶ Avoid reaction with oxidising agents



X — Must not be stored together
O — May be stored together with specific preventions
+ — May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
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XANTHAN GUM

Ingredient	TEEL-1	TEEL-2	TEEL-3
XANTHAN GUM	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
gum xanthan	Not Available	Not Available

Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ▶ Safety glasses with side shields ▶ Chemical goggles. ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience.
Skin protection	See Hand protection below
Hands/feet protection	<p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care.</p> <p>Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.</p> <ul style="list-style-type: none"> ▶ polychloroprene. ▶ nitrile rubber. ▶ butyl rubber.
Body protection	See Other protection below
Other protection	<p>No special equipment needed when handling small quantities.</p> <p>OTHERWISE:</p> <ul style="list-style-type: none"> ▶ Overalls. ▶ Barrier cream. ▶ Eyewash unit.

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	<p>Cream to tan-coloured dry powder; mixes with water. Produced from simple sugars using a fermentation process, and derives its name from the species of bacteria used, Xanthomonas campestris. The xanthan gum polysaccharide consists of a backbone of beta-(1->4) linked D-glucose molecules. Every second glucose molecule is substituted at C3 with a trisaccharide side chain consisting of beta-D-mannose-(1->4)-b-D-glucuronic acid-(1->2)-a-D-mannose. In the side chains, the terminal mannose moiety is partially substituted with a pyruvate residue linked as an acetal to the 4- and 6- positions; the internal mannose unit is acetylated at C-6. The viscosity of xanthan gum solutions decreases with higher shear rates; this is called shear thinning or pseudoplasticity. This means that a product subjected to shear, whether from mixing, shaking or even chewing, will thin out, but, once the shear forces are removed, the food will thicken back up. In salad dressing, for example, the addition of xanthan gum makes it thick enough at rest in the bottle to keep the mixture fairly homogeneous, but the shear forces generated by shaking and pouring thin it, so it can be easily poured. When it exits the bottle, the shear forces are removed and it thickens again,</p>		
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Physical state	Divided Solid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	>200
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available

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Melting point / freezing point (°C)	Not Applicable	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	>10000000
Flash point (°C)	> 93 (PMCC)	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (%)	7
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	Excessive inhalation of dust can impede respiration due to its hygroscopic properties, i.e. it can form a paste or gel in the airways. The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.	
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. Polysaccharides are not easily absorbed from the digestive tract, but may produce a laxative effect. Larger doses may produce intestinal or stomach blockage. <	
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.	
Eye	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.	
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis, caused by particles less than 0.5 micron penetrating and remaining in the lung. Studies indicate that diets containing large amounts of non-absorbable polysaccharides, such as cellulose, might decrease absorption of calcium, magnesium, zinc and phosphorus.	
gum xanthan	TOXICITY Not Available	IRRITATION Not Available
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

GUM XANTHAN	Evaluation of workers exposed to xanthan gum dust found evidence of a link to respiratory symptoms.. On May 20, 2011, the FDA issued a press release about SimplyThick, a food-thickening additive containing xanthan gum as the active ingredient, warning parents, caregivers and health care providers not to feed SimplyThick, a thickening product, to premature infants[. The concern is that the product may cause premature infants to suffer necrotizing enterocolitis. According to a 2017 safety review by a scientific panel of the European Food Safety Authority (EFSA), xanthan gum (European food additive number E 415) is extensively digested during intestinal fermentation, and causes no adverse effects, even at high intake amounts. The EFSA panel found no concern about genotoxicity from long-term consumption. EFSA concluded that there is no safety concern for the general population when xanthan gum is consumed as a food additive. Xanthan gum (E 415) can be regarded as non-toxic based on the results of acute oral toxicity studies. From short-term and subchronic toxicity studies, no toxicological relevant changes were reported apart from a decrease in red blood cell count and haemoglobin concentration in dogs receiving 2,000 mg/kg body weight (bw) per day for 12 weeks. This effect was marginal and it was not reproduced in a dog chronic toxicity study at 1,000 mg/kg bw per day, the highest dose tested. The EFSA Panel noted that decreased total serum cholesterol was frequently reported. For genotoxicity, insufficient experimental data were available. However, taking into account the information on structure-activity relationships and considering that xanthan gum has a molecular weight far above the threshold for absorption, according to absorption, distribution, metabolism, and excretion (ADME) data, it was not degraded in the
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intestine and is slightly fermented to non-hazardous short-chain fatty acids by the gut microbiota, the Panel concluded that xanthan gum (E 415) does not give rise to concerns for genotoxicity. In chronic and long-term studies, no adverse effects, including biochemical and haematological parameters, were reported in dogs and rats. From a human study with repeated intake ranging from 10.4 to 12.9 g of xanthan gum per day (assuming a body weight of 70 kg corresponding to 149–184 mg/kg bw per day), it was reported that xanthan gum acts as a bulk laxative causing no adverse dietary nor physiological effects. The only effects observed were moderate (10%) reduction in serum cholesterol ($p < 0.05$) and a significant increase in faecal bile acid concentrations ($p < 0.05$). A study investigating the effect of repeated intake of 15 g xanthan gum/day (assuming a bodyweight of 70 kg corresponding to 214 mg/kg bw per day) on colonic function showed significant increases in stool output ($p < 0.01$), frequency of defecation ($p < 0.05$) and flatulence ($p < 0.01$) due to the ingestion of the xanthan gum. In clinical studies involving infants, the Panel noted that consumption of xanthan gum in infant formula or formula for special medical purposes in infant was well tolerated, did not influence minerals (Ca, P, Mg), fat and nitrogen balance and did not affect growth characteristics up to concentration of 1,500 mg/L (232 mg/kg bw per day). These results were supported by the outcome of the post-marketing surveillance with formulae containing xanthan gum at a concentration of approximately 750 mg/L of reconstituted formula. No significant acute toxicological data identified in literature search.

Acute Toxicity	✗	Carcinogenicity	✗
Skin Irritation/Corrosion	✗	Reproductivity	✗
Serious Eye Damage/Irritation	✗	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

gum xanthan	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Sugar-based compounds (saccharides), including polysaccharides are generally easily decomposed by biodegradation. Not all polysaccharides decompose with equal rapidity, and polysaccharides are also synthesised by microorganisms during, for example, the compost maturation phases. Water-insoluble species such as cellulose take longer to decompose and those with a significant degree of branching also take longer.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	Disposal considerations
	<p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.</p> <p>A Hierarchy of Controls seems to be common - the user should investigate:</p> <ul style="list-style-type: none"> ▶ Reduction ▶ Reuse ▶ Recycling ▶ Disposal (if all else fails) <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.</p> <ul style="list-style-type: none"> ▶ DO NOT allow wash water from cleaning or process equipment to enter drains. ▶ It may be necessary to collect all wash water for treatment before disposal. ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▶ Where in doubt contact the responsible authority. ▶ Recycle wherever possible. ▶ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. ▶ Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material) ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 Transport information

Labels Required

XANTHAN GUM

Marine Pollutant	NO
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Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
gum xanthan	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
gum xanthan	Not Available

SECTION 15 Regulatory information

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

gum xanthan is found on the following regulatory lists

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances	US TSCA Section 5(a)(2) - Significant New Use Rules (SNURs)
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Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	No
Specific target organ toxicity (single or repeated exposure)	No
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	No

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

None Reported

State Regulations

US. California Proposition 65

None Reported

National Inventory Status

National Inventory	Status
Australia - AIIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (gum xanthan)

XANTHAN GUM

National Inventory	Status
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes

Legend:
Yes = All CAS declared ingredients are on the inventory
No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 Other information

Revision Date	17/08/2019
Initial Date	16/07/2003

SDS Version Summary

Version	Date of Update	Sections Updated
4.1.2.1	15/09/2005	Supplier Information
6.1.2.1	17/08/2019	Appearance, Toxicity and Irritation (Other), Use
6.1.3.1	10/05/2021	Regulation Change
6.1.4.1	24/05/2021	Regulation Change
6.1.4.2	30/05/2021	Template Change
6.1.4.3	04/06/2021	Template Change
6.1.4.4	05/06/2021	Template Change
6.1.4.5	09/06/2021	Template Change
6.1.4.6	11/06/2021	Template Change
6.1.4.7	15/06/2021	Template Change
6.1.4.8	05/07/2021	Template Change

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit.
IDLH: Immediately Dangerous to Life or Health Concentrations
ES: Exposure Standard
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index
AIC: Australian Inventory of Industrial Chemicals
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
NLP: No-Longer Polymers
ENCS: Existing and New Chemical Substances Inventory
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory
INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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