



SAFETY DATA SHEET

Section 1: Identification

Product Name:	Xanthan Gum (all sizes, all containers, all grades)
Chemical Name/Synonyms:	Xanthan Gum; Xanthan; Xanthan Gum Powder; Gum, Xanthan Powder; Xanthan Gum Powder; Xanthum Gum; Xanthum Gum Powder, Xanthum
Company (responsible party):	ESSENTIAL DEPOT, INC. 4605 Oak Circle Sebring, FL 33870 863.662.0481 www.EssentialDepot.com
Emergency Contact:	CHEMTREC from Inside the USA: 800.424.9300 CHEMTREC International: 703.741.5970
Product Use:	Food additive. Thickening agent. Stabilizer. Emulsifier. Cosmetic Additive. Industrial use.

Section 2: Hazard(s) Identification

OSHA/HCS status:	Not a hazardous substance or mixture per GHS (the Globally Harmonized System)
Classification of the substance or mixture:	Not a hazardous substance or mixture per GHS (the Globally Harmonized System)

GHS Label Elements:

Signal Word(s): None required.

Hazard Statements: None required.

Pictograms: Not required.

Hazard Classification: Not classified.

Precautionary Statements:

Prevention:

- Wear protective gloves or clothing.
- Use only in a well-ventilated area.
- Do not breathe dust.
- Wash hands thoroughly after handling.
- Wash contaminated clothing before reuse.

Response:

- Seek medical advice/attention if you feel unwell or immediately call a POISON CENTER.
- IF INHALED: Remove person to fresh air and maintain person in position comfortable for breathing.
- IF SWALLOWED: Rinse mouth with water and afterwards drink plenty of water.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Wash skin with warm water.
- IF IN EYES: Rinse immediately with plenty of water. Remove contact lenses if can be easily done. See medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.
- Treat symptomatically.

Storage:

- Store in a cool dark location.
- Keep container tightly closed.

Disposal:

- Dispose of contents and container in accordance with all local, regional, national, and international regulations.

Supplemental Label Elements:

- Do not taste or swallow.
- Wash thoroughly after handling.

Description of Other Hazard(s):

- May cause temporary respiratory or flu-like symptoms.

Section 3: Composition/Information on Ingredients

Chemical Name	Synonym	CAS Number	% Concentration
Xanthan Gum	-	11138-66-2	100

Section 4: First-Aid Measures

After skin contact: Wash skin with warm water. Remove and wash with warm water contaminated clothing.

After eye contact: Rinse immediately with plenty of water. Remove contact lenses if can be easily done. See medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.

After inhalation: Remove person to fresh air and maintain person in position comfortable for breathing.

After ingestion: Rinse mouth with water and afterwards drink plenty of water.

Most important symptoms/effects, acute and delayed:

Potential Acute Symptoms

Skin: None known. Feels slick/slimy on the skin.

Eyes: Unknown.

Respiratory: May cause temporary respiratory or flu-like symptoms.

Ingestion: May feel bloated.

Signs or Symptoms of over-exposure

Skin:

- None known.

Eyes:

- Unknown

Respiratory: Adverse symptoms may include the following:

- Temporary Flu-like symptoms
- Temporary respiratory tract irritation
- Temporary coughing
- Temporary headache(s)

Ingestion: May feel bloated.

Most important symptoms/effects, acute and delayed

May cause temporary respiratory or flu-like symptoms:

- Temporary Flu-like symptoms
- Temporary respiratory tract irritation
- Temporary coughing
- Temporary headache(s)

INDICATORS of the need for IMMEDIATE medical attention and/or special treatment needed

SKIN: None known.

Swallowed/Ingested: Digestive irregularities.

IN the Eyes: Pain or vision issues.

Provide general supportive measures and treat symptomatically.

Section 5: Fire-Fighting Measures

Suitable extinguishing media: **SMALL FIRE:** water spray (not high volume), dry powder, carbon dioxide.

LARGE FIRE: Use dry chemical powder, CO₂, alcohol-resistant foam or water spray (fog).

UNSUITABLE extinguishing media: Do not use high volume water jet.

Specific hazards arising from the chemical: A potential dust explosion hazard. Avoid generating dust, specially fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source.

Do not use a high volume water spray as it may scatter and spread the fire.

Hazardous decomposition products formed under fire conditions.

Hazardous thermal decomposition products: Carbon dioxide.
Carbon monoxide.

Special protective actions for fire-fighters: Standard procedure for chemical fires.

Special protective equipment for fire-fighters: Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product. Wear fire resistant or flame retardant clothing.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Avoid breathing the dust. Remove to fresh air. Stay away from dust deposit accumulations on surfaces as may form an explosive mixture if released into the air insufficient concentration.

For emergency responders: Avoid breathing the dust. Dust deposit accumulations on surfaces may form an explosive mixture if released into the air insufficient concentration. Ensure adequate ventilation, especially in confined areas. Carefully shovel or sweep up spilled material and place in suitable container.

Environmental precautions: No special environmental precautions required.

Clean up containment methods and materials:

Small Spill: Avoid dust generation. Avoid breathing the dust. Dust deposit accumulations on surfaces as may form an explosive mixture if released into the air insufficient concentration. Ensure adequate ventilation, especially in confined areas. Carefully shovel or sweep up spilled material and place in suitable container.

Large Spill: Avoid dust generation. Avoid breathing the dust. Dust deposit accumulations on surfaces as may form an explosive mixture if released into the air insufficient concentration. Ensure adequate ventilation, especially in confined areas. Carefully shovel or sweep up spilled material and place in suitable container.

Section 7: Handling and Storage

Protective Measures: Use only with adequate ventilation. Wear appropriate personal protective equipment. Avoid direct contact with the human body. Do not breathe dust. Do not get in eyes, on skin or on clothing. Do not inhale dust. Take measures to prevent the build up of electrostatic charge.

Conditions for Safe Storage, including incompatibilities: Ventilate the area before entry. Keep only in the original container. Keep container tightly closed. No special incompatibilities to be mentioned. Store in a dry, cool, and dark area. User should ensure that equipment and procedures are in place to ensure safe handling. No decomposition if stored and applied as directed.

Section 8: Exposure Controls/personal Protection

Name	OSHA PEL (TWA)	ACGIH PEL (TWA)	NIOSH REL
No components with workplace control parameters.	No known exposure limits.		

Appropriate engineering controls:	Good general ventilation should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Environmental exposure controls:	No environmental hazards are known. However, controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.
Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/Face protection:	Safety glasses.
Hand protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Consider the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.
Body protection:	Personal protective equipment for the body should be selected based on the amount and concentration, task being performed, the risks involved, and should be approved by a specialist before handling this product.
Respiratory protection:	If workers are exposed to concentrations above the exposure limit, they must use appropriate,

certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9: Physical and Chemical Properties

Form: Powder

Color: off-white - beige

Odor: Characteristic

Odor threshold: Not determined

pH: 6 - 8

Melting point/melting range: decomposes without melting

Boiling point/boiling range: not applicable

Flash point: not applicable

Evaporation rate: not available

Flammability: does not ignite

Upper/lower flammability or explosive limits: no data available

Auto ignition temperature: no data available

Decomposition temperature: no data available

Danger of explosion: not explosive unless the dust is permitted to accumulate

Vapor pressure: not applicable

Vapor density: no data available

Relative density: no data available

Solubility(ies): Completely soluble in water
Insoluble in other solvents: alcohol

Solubility in Water: 100%

Partition coefficient: no data available

Viscosity (dynamic and kinematic): no data available

Explosive properties: not explosive

Oxidizing properties: no oxidizing effect

Dust explosion class: St1

Section 10: Stability and Reactivity

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: Stable under normal conditions.

Conditions to avoid: Avoid dust formation.

Incompatible materials: No dangerous reaction known under conditions of normal use.

Hazardous decomposition products: No data available

Build up of dangerous toxic fumes is possible in cases of fire or high temperature.

Carbon dioxide

Carbon monoxide

Section 11: Toxicological Information

ACUTE TOXICITY				
Name	Result	Species	Dose	Exposure
Xanthan Gum		Rat	LD50 Oral 45,000 mg/kg	-
		Mouse	LD50 Oral 20,000 mg/kg	-
	No acute inhalation toxicity	Rat	LC50 Inhalation 21 mg/l	1 hr
	Undetermined because no mortality observed	Rat	LC50 Inhalation Maximum achievable concentration	4 hrs

	No respiratory or skin sensitization	Guinea Pig	Skin	
	No respiratory or skin sensitization	Guinea Pig	Eye	

IRRITATION / CORROSION					
Name	Result	Species	Score	Exposure	Observation
Xanthan Gum	No skin irritation	Rat	-	Dermal	360 hrs
	No skin irritation	Rabbit	-	Dermal	120 hrs
	No eye irritation	Rat	-	Eye	120 hrs

SENSITIZATION				
Name	Result	Species	Dose	Exposure
	No respiratory or skin sensitization	Guinea Pig	Skin	
	No respiratory or skin sensitization	Guinea Pig	Eye	

MUTAGENICITY
Mutagenic effects not observed in testing.

CARCINOGENICITY
Not classifiable as a human carcinogen.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a 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 on OSHA's list of regulated carcinogens.
NTP: No component of this product present at levels greater than or equal to 0.1% is identifiable as a known or anticipated carcinogen by NTP.

REPRODUCTIVE TOXICITY
Conclusion/Summary: Not available.

TERATOGENICITY
Conclusion/Summary: Not available.

SPECIFIC TARGET ORGAN TOXICITY (repeated dose)				
Name	Result	Species	Route of Exposure	Exposure Time

Xanthan Gum	No adverse effect observed in chronic toxicity tests.	Rat	Oral < 1000 mg/kg	24 hrs
	Target Organs: Respiratory system Symptoms: no information available	Human	Inhalation	-
	Target Organs: Skin Symptoms: no information available	Human	Skin contact	-
	Target Organs: Eyes Symptoms: no information available	Human	Eye contact	-
	Target Organs: Digestive organs Symptoms: no information available	Human	Ingestion	-

SPECIFIC TARGET ORGAN TOXICITY (repeated exposure)

Not available.

ASPIRATION HAZARD

Not available.

LIKELY ROUTES OF EXPOSURE

Routes of anticipated entry: Oral, Dermal, Inhalation.

POTENTIAL ACUTE HEALTH EFFECTS

Eye Contact:	Not Available
Inhalation:	Not Available
Skin Contact:	Not Available
Ingestion:	Not Available

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Eye Contact:	Not Available
Inhalation:	Not Available
Skin Contact:	Not Available
Ingestion:	Not Available

DELAYED and IMMEDIATE and CHRONIC EFFECTS from SHORT and LONG TERM EXPOSURE

SHORT TERM:

Potential Immediate Effects:

Eye Contact:	Not Available
Inhalation:	Not Available
Skin Contact:	Not Available
Ingestion:	Not Available

Potential Delayed Effects:

Eye Contact:	Not Available
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Inhalation:	Not Available
Skin Contact:	Not Available
Ingestion:	Not Available
LONG TERM:	
Potential Immediate Effects:	
	Not Available
Potential Delayed Effects:	
	Not Available
POTENTIAL CHRONIC HEALTH EFFECTS:	
General:	Not Available
Carcinogenicity:	Not Available
Mutagenicity:	Not Available
Reproductive toxicity:	Not Available

NUMERICAL MEASURES OF TOXICITY					
Acute toxicity estimates					
Name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapor) (mg/l)	Inhalation (dust/mist) (mg/l)
Xanthan Gum	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable

Section 12: Ecological Information (non-mandatory)

ECOTOXICITY			
This product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.			
Name:	Result	Species	Exposure
Xanthan Gum	No adverse effect observed in acute toxicity tests.	Oncorhynchus mykiss (Rainbow Trout)	96 hours 420 mg/l

PERSISTENCE AND DEGRADABILITY			
Name:	Method		Exposure
Xanthan Gum	OECD Test Guideline 301F	Biodegradation: 78%	28 days
Conclusion/Summary:		Readily biodegradable.	
Xanthan Gum	Biochemical Oxygen Demand		200 mg/g
Conclusion/Summary:		Biochemical oxygen demand within 5 days	

BIOACCUMULATIVE POTENTIAL

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

MOBILITY IN SOIL

Distribution among environmental compartments:	No data available
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OTHER ADVERSE EFFECTS

Results of PBT and vPvB assessment:

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

This substance is not considered to be very persistent and very bioaccumulating (vPvB)

This product has no known ecotoxicological effects.

Section 13: Disposal Considerations (non-mandatory)

Disposal Methods:

Product waste: Dispose of contents and container in accordance with all local, regional, national and international regulations. When/Where possible, recycling is preferred to disposal or incineration.

Packaging waste: Dispose of contents and container in accordance with all local, regional, national and international regulations. Dispose of the same as unused product.

Section 14: Transport Information (non-mandatory)

Not regulated as a dangerous good or as a hazardous material.

	DOT Classification	IMDG	IATA
UN Number	N/A	N/A	N/A
UN Proper Shipping Name	N/A	N/A	N/A
Transport Hazard Class(es)	N/A	N/A	N/A
Packing Group	N/A	N/A	N/A
Environmental Hazards	N/A	N/A	N/A

Additional Information:

DOT Classification:	Reportable Quantity	Unregulated
	Limited Quantity	Unregulated
IMDG:		Unregulated

IATA:	Unregulated
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Special precautions for user:

Avoid inhalation of the dust or dust accumulation on surfaces.

Transport in bulk according to IMO instruments:

Unregulated.

Section 15:

U. S. REGULATIONS

Federal Regulations:

TSCA: No substances are subject to a Significant New Use Rule.
TSCA 12(b): No substances are subject to TSCA 12(b) export notification requirements.

Clean Air Act Section 307:

Not listed.

SARA 302/304

Composition/Information on ingredients:

This product is not subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 RQ:

Not Applicable.

SARA 311/312

Classification:

Fire Hazard

SARA 313

Form R - Reporting Requirements:

This product 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.

STATE REGULATIONS

STATE REGULATIONS:

California Prop 65:

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

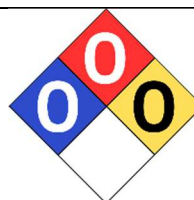
INTERNATIONAL REGULATIONS	
Chemical Weapon Convention List Schedules I, II & III Chemicals:	Not listed.
Montreal Protocol:	Not listed.
Stockholm Convention on Persistent Organic Pollutants:	Not listed.
Rotterdam Convention on Prior Informed Consent (PIC):	Not listed.
UNECE Aarhus Protocol on POPs and Heavy Metals:	Not listed.

REPORTED IN THE FOLLOWING INVENTORIES:		
Country(s) or Region	Inventory Name	In Inventory (Yes/No*)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Japan	Industrial Safety and Health Lw (ISHL)	Yes
Korea	Korean Existing Chemicals Inventory (KECI)	Yes
New Zealand	New Zealand Inventory (NZIoC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
U.S. and Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
	Regulation, Evaluation, Authorization and Restriction of Chemicals (REACH)	**Yes
<p>* "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s). "No" indicates that one or more components of his product are not listed or exempt from listing on the inventory administered by the governing country(s).</p> <p>**This substance is exempt from registration according to Regulation (EC) No. 1907/2006 (REACH)</p>		

Section 16:

Hazardous Material Information System (HMIS) ratings (U.S.A.):	Health: 0
	Flammability: 0
	Physical Hazard: 0

NFPA Ratings:	Health: 0
	Flammability: 0
	Physical Hazard: 0



Date of Last Revision: 12.14.2023

Previous Revision Dates: 12.14.2021, 12.18.2023

Date Created: 10.07.2008

KEY TO ABBREVIATIONS	
ATE	ATE = Acute Toxicity Estimate
AMP	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift
BCF	Bioconcentration Factor
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	Department of Transportation
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
IMDG	International Maritime Dangerous Goods
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median lethal Dose)
LowPow	logarithm of the octanol/water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("MARPOL" = marine pollution)
N/A	Not Available
NTP	National Toxicology Program
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
UN	United Nations

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