



(Material) Safety Data Sheet

Transport Symbol	WHMIS	NFPA	Personal Protective Equipment
Not controlled	Not controlled		

Original Preparation Date: 07-Oct-2008

Revision Date: 14-Nov-2013

Revision Number: 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name:

OptiXan™ Dispersible T

Product Code:

174965

Synonyms:

Xanthan gum-modified. Xanthan gum- glyoxal surface treated.

CAS: 375348-43-9.

Contact Manufacturer:

Archer Daniels Midland Company

4666 Faries Parkway

Decatur, IL 62526, USA

Telephone Number: (+1) 217-424-5200

Emergency response telephone number:

Chemtrec 1-800-424-9300 (CCN 1635)

Use of the Substance / Preparation:

Thickening agent; Rheology control agent; Stabilizer; For industrial use only; Not for human consumption; Not for use as animal feed

2. HAZARDS IDENTIFICATION

Emergency Overview

Warning. May cause an allergic skin reaction. May form combustible dust concentrations in air (during processing and handling). Product dust may cause mild, mechanical irritation.

Appearance

Cream to Light yellow

Physical State

Solid / Powder or Granules

Odor

Characteristic

Classification according to 29 CFR 1910, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS):

Skin Sensitization	Category 1
Hazards Not Otherwise Classified	Combustible Dust

OSHA / GHS Label Elements

Signal Word:	Warning
GHS Hazard Pictogram(s):	
Hazard Statement(s):	H317 May cause an allergic skin reaction May form combustible dust concentrations in air.
Prevention Precautionary Statements:	Avoid breathing fume/gas/mist/vapours/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.
Response Precautionary Statements:	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice.
Disposal Precautionary Statements:	Dispose of contents/container in accordance with all applicable national and local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation Mixture
Chemical Family Polysaccharide gums
CAS-No 375348-43-9.

The following component(s) in this product are considered hazardous under applicable OSHA (USA), WHMIS (Canada), and/or NOM-002-SCT-2003 (Mexico) regulations

Chemical Name	CAS-No	Weight %	North American Hazard Indicator
Glyoxal	107-22-2	< 1.0	OSHA / GHS: Skin Irrit. 2. Skin Sens. 1. Eye Irrit. 2. Acute Tox. 4. Muta. 2. WHMIS: D2B. F. (Present on Canadian Hazardous Products Act Ingredient Disclosure List)

Non-hazardous Components

Chemical Name	CAS-No	Weight %	North American Hazard Indicator
Xanthan gum	11138-66-2	99-100	None known

Contains trace amount of Ethylene Glycol. Formaldehyde.

4. FIRST AID MEASURES

Description of first aid measures

General Advice Contains glyoxal. May produce an allergic reaction. When symptoms persist or in all cases of doubt seek medical advice.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move to fresh air. Call a doctor immediately if allergic signs, particularly in the respiratory tract, are observed.

Ingestion Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and affects, both acute and delayed

Eyes Dust may cause mechanical irritation to eyes resulting in redness or watering.

Skin Contains glyoxal. May produce an allergic reaction. Product dust may cause mild, mechanical irritation.

Inhalation Contains glyoxal. May produce an allergic reaction. See section 8 of this sheet for exposure limits pertaining to nuisance dust or "particulates not otherwise regulated". and, glyoxal. Dust may cause irritation of respiratory tract.

Ingestion Not for human consumption. Product may expand upon contact with moisture. Ingestion may cause irritation to mucous membranes.

Main Symptoms Itching. Shortness of breath.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties

Fine dust dispersed in air may ignite. Risk of ignition followed by flame propagation or secondary explosions should be prevented by avoiding accumulation of dust, e.g. on floors and ledges. As with most organic solids, combustion is possible at elevated temperatures or by contact with an ignition source.

Extinguishing media

Suitable Extinguishing Media Water. Carbon dioxide (CO₂). Foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None known.

Special hazards arising from the substance or mixture

Hazardous Combustion Products Carbon monoxide (CO), Carbon dioxide (CO₂).

Specific Hazards Arising from the Chemical None known.

Sensitivity to mechanical impact No information available.

Sensitivity to static discharge Yes. (as dust).
Further information Dust explosibility class = 1 [Kst (bar-m/sec) = 92]. Weak to moderately explosible.

Advice for fire-fighters

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health 1
Flammability 1

Stability and Reactivity 0
Physical hazard None known



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid contact with skin, eyes and clothing. Avoid dust formation. Use personal protective equipment. For personal protection see section 8.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water. Prevent product from entering drains. Do not allow material to contaminate ground water system.

Methods for Clean-up

Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. For disposal information see section 13.

7. HANDLING AND STORAGE

Handling

Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation in confined areas. Fine dust dispersed in air may ignite. Refer to NFPA 61, "Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities".

Storage

Keep in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

As an airborne dust, exposure limits pertaining to "particulates not otherwise regulated" have been provided below.

Chemical Name	ACGIH TLV	OSHA PEL	MEXICO	NIOSH
Glyoxal	[SEN] TWA: 0.1 mg/m ³ inhalable fraction and vapor			
Particulates not otherwise regulated	TWA: 10 mg/m ³ inhalable particles, recommended TWA: 3 mg/m ³ respirable particles, recommended	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	not listed	not listed

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits. However it is the duty of the user to verify this and follow given exposure limits at the workplace.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment

Eye/face Protection.

If exposed to airborne dust, appropriate safety glasses with side-shields or safety goggles are recommended. If airborne dust concentrations are excessive, wear goggles.

Skin and Body Protection

Protective gloves. Long sleeved clothing.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In case of insufficient ventilation wear suitable respiratory equipment. If exposed to airborne dust, use appropriate NIOSH approved (or equivalent) respiratory protection.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Cream to Light yellow
Physical State	Solid / Powder or Granules
Odor	Characteristic
Odor Threshold	No information available
pH	Neutral
Flash Point	Not applicable (solid)
Autoignition Temperature	390 °C / 734 °F
Boiling point	Not applicable (solid)
Melting/Freezing Point	No information available
Decomposition temperature	No information available
Oxidizing Properties	No information available
Water Solubility	Soluble (At concentrations > 5%, the solution becomes viscous and pasty.)
Evaporation Rate	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Partition Coefficient (n-octanol/water)	No information available

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Possibility of Hazardous Reactions Hazardous polymerization does not occur.

Conditions to Avoid Avoid dust formation. Heat, flames and sparks.

Incompatible Materials No materials to be especially mentioned.

Hazardous Decomposition Products Thermal decomposition may lead to release of, Carbon monoxide (CO), Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Skin Sensitizer Category 1.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

Potential health effects

Eyes	Dust may cause mechanical irritation to eyes resulting in redness or watering.
Skin	Contains glyoxal. May produce an allergic reaction. Product dust may cause mild, mechanical irritation.
Inhalation	Contains glyoxal. May produce an allergic reaction. See section 8 of this sheet for exposure limits pertaining to nuisance dust or "particulates not otherwise regulated". and. glyoxal. Dust may cause irritation of respiratory tract.
Ingestion	Not for human consumption. Product may expand upon contact with moisture. Ingestion may cause irritation to mucous membranes.
Main Symptoms	Itching. Shortness of breath.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component Information:

Chemical Name	Fresh Water Algae	Acute Fish Toxicity	Daphnia (Water flea)	Effects on micro-organisms	Other
Glyoxal	EC50: 96h 0 - 348.59 mg/L (Pseudokirchneriella subcapitata) EC50: 72h >100mg/L (Desmodesmus subspicatus)	LC50: 96h 460-680mg/L (Leuciscus idus) static LC50: 96h 215mg/L (Pimephales promelas) static	EC50: 48h 404 mg/L (Daphnia magna) LC50: 96h 134mg/L (Americamyris bahia)		Seawater algae: EC50: 72h 347.1 mg/L EC50: 96h 313.8mg/L (Skeletonema costatum)

Persistence/Degradability

Biodegradable, with COD ca1600mg O₂/g, BOD₅ ca200mg O₂/g.

Mobility

Soluble in water. (At concentrations > 5%, the solution becomes viscous and pasty.)

13. DISPOSAL CONSIDERATIONS

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

Waste Disposal Methods

Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.

Contaminated Packaging

Empty containers should be decontaminated and taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

Domestic transport regulations (USA)

DOT Not regulated

Domestic transport regulations (Canada)

TDG Not regulated

Domestic transport regulations (Mexico)

MEX Not regulated

International transport regulations

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	AICS	ENCS ISHL	CHINA	PICCS	KECL	NZIoC
Xanthan gum	Yes	Yes	No	Yes 234-394-2	No	Yes	Yes (8)-535	Yes	Yes	Yes KE-35422	Yes
Glyoxal	Yes	Yes	No	Yes 203-474-9	No	Yes	Yes (2)-510 (2)-509	Yes	Yes	Yes KE-27447	Yes

USA**Federal Regulations****Ozone Depleting Substances:**

No Class I or Class II material is known to be used in the manufacture of, or contained in, this product.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 372.

CERCLA/SARA 103-302

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 103-302.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 63)

This product is known to contain HAPs at levels below 0.1%.

State Regulations**California Proposition 65**

This product is known to contain the following Proposition 65 chemicals:

Chemical Name	CAS-No	Weight %	Category
Formaldehyde	50-00-0	Trace	Carcinogen

State Right-to-Know

Component Information.

Chemical Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
Ethylene glycol	0.014	Yes	Yes	Yes 0878	Yes Environmental hazard

Canada

WHMIS Product Classification

Not a WHMIS controlled product.

WHMIS Ingredient Disclosure List IDL

No known component is listed on the WHMIS ingredients disclosure list at reportable levels.

(NPRI) Canadian National Pollutant Release Inventory

The product is known to contain trace levels of part 1, group 1 substances.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Mexico

Mexico - Grade

Slight risk, Grade 1

16. OTHER INFORMATION

Prepared By: ADM Bio-Products
Original Preparation Date: 07-Oct-2008
Revision Date: 14-Nov-2013
Revision Number: 2
Reason for revision: New SDS format. This version replaces all previous versions.

Abbreviations and acronyms

ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values
AICS - Australian Inventory of Chemical Substances (Australia)
CAS - Chemical Abstract Service
CHINA - Chinese Inventory of Existing Chemical Substances (China)
DOT - U.S. Department of Transportation
DSL - Domestic Substance List (Canada)
EINECS - European Inventory of Existing Commercial Chemical Substances (EU)
ELINCS - European List of Notified Chemical Substances (EU)
ENCS - Existing and New Chemical Substances (Japan) / ISHL - Industrial Health and Safety Law (Japan)
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
IATA - International Air Transport Association Dangerous Goods Regulations
ICAO - International Civil Aviation Organisation
ICL - In Commerce List (Canada)
IMDG - International Maritime Dangerous Goods Code
IMO - International Maritime Organization
KECL - Korean Existing and Evaluated Chemical Substances (Korea)
MEX - NOM-002-SCT/2003 List of Hazardous Substances and Materials Most Commonly Transported
NDSL - Non Domestic Substances List (Canada)
NFPA - National Fire Protection Association
NIOSH - National Institute of Occupational Safety and Health
NZIoC - New Zealand Inventory of Chemicals (New Zealand)
OSHA - Occupational Safety & Health Administration
OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits
PICCS - Inventory of Chemicals and Chemical Substances (Philippines)
STOT - Specific Target Organ Toxicity
TDG - Transportation of Dangerous Goods (Transport Canada)
TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA)
TWA - Time Weighted Average: Average concentration that should not be exceeded during a work day (usually 8-hours)
WHMIS - Workplace Hazardous Materials Information System

The information provided on this (M)SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of sheet