



# Material Safety Data Sheet

NFPA	WHMIS	Personal Protective Equipment	Transport Symbol

Preparation Date: 16-Sep-2009

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Revision Number: 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:**

Clintose® Dextrose A

**Product Code:**

015810

**Synonyms:**

Dextrose A, Glucose, Dextrose Monohydrate

**Contact Manufacturer:**

Archer Daniels Midland Company

4666 Faries Parkway

Decatur, IL 62526, USA

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

**Use of the Substance / Preparation:**

Food additive.

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Product dust may be irritating to eyes, skin and respiratory system. Fine dust dispersed in air may ignite.

**Appearance**

White

**Physical State**

Powder

**Odor**

Odorless

### Potential Health Effects

**Principle Routes of Exposure**

Inhalation. Eye contact. Skin contact. Ingestion.

**Acute Effects**

**Eyes**

Contact with eyes may cause mechanical irritation.

**Skin**

Product dust may cause mild, mechanical irritation.

**Inhalation**

Dust may cause irritation of respiratory tract.

**Ingestion**

Health injuries are not known or expected under normal use.

**Chronic Effects**

None known.

**Aggravated Medical Conditions**

Skin disorders. Respiratory disorders.

**Potential Environmental Effects**

See Section 12 for additional ecological information.

**Toxicological information**

See Section 11 for additional toxicological information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common Name**

Dextrose

**Chemical Family**

Carbohydrate

**Non-hazardous Components**

Chemical Name	CAS-No	Weight %	North American Hazard Indicator
Glucose	50-99-7	91.5	-
Water	7732-18-5	8.5	-

#### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids.
<b>Skin Contact</b>	Wash off with warm water and soap.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water.
<b>Notes to Physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Fine dust dispersed in air may ignite. Risks of ignition followed by flame propagation or secondary explosions should be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water. Dry chemical. Carbon dioxide (CO <sub>2</sub> )
<b>Unsuitable Extinguishing Media</b>	None known.
<b>Hazardous Combustion Products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ).
<b>Explosion Data</b>	
<b>Sensitivity to mechanical impact</b>	No information available.
<b>Sensitivity to static discharge</b>	Yes (as dust).
<b>Specific Hazards Arising from the Chemical</b>	None known.
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

Health 0  
Flammability 1

Stability and Reactivity 0  
Physical hazard -



#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Avoid dust formation. Use personal protective equipment.
<b>Environmental Precautions</b>	Local authorities should be advised if significant spillages cannot be contained.
<b>Methods for Clean-up</b>	Shovel or sweep up.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	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". Ensure adequate ventilation.
<b>Storage</b>	Keep in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Limits

Chemical Name	ACGIH TLV	OSHA PEL	MEXICO	NIOSH	OSHA
Particulates not otherwise regulated	TWA: 10 mg/m <sup>3</sup> inhalable particles, recommended TWA: 3 mg/m <sup>3</sup> respirable particles, recommended	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	not listed	not listed	TWA: 10 mg/m <sup>3</sup> inhalable particulate TWA: 3 mg/m <sup>3</sup> respirable particulate

### 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 Personal Protective Equipment

Handle in accordance with good industrial hygiene and safety practice.

#### Eye/face Protection.

Safety glasses with side-shields. If airborne dust concentrations are excessive, wear goggles.

#### Skin and Body Protection

Long sleeved clothing.

#### Respiratory Protection

In case of insufficient ventilation wear suitable respiratory equipment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White
Physical State	Powder
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Flash Point	Not applicable
Autoignition Temperature	No information available
Boiling point	Not applicable
Melting/Freezing Point	83 °C / 181 °F
Decomposition temperature	No information available
Oxidizing Properties	No information available
Specific Gravity	No information available
Water Solubility	Soluble
Evaporation Rate	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Partition Coefficient (n-octanol/water)	No information available

## 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid dust formation.
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	None known.
Possibility of Hazardous Reactions	None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**LD50 Oral:** No information available

**LD50 Dermal:** No information available

**LC50 Inhalation:** No information available

### **Toxicology data for the components**

#### Chronic Effects

#### Carcinogenicity

There are no known carcinogenic chemicals in this product.

**OSHA: (Occupational Safety & Health Administration)**

Not Listed

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

Not Listed.

**NTP: (National Toxicity Program)**

Not Listed

**Mexico: (Official Mexican Norm NOM-010-STPS-1999)**

Not Listed.

**IARC: (International Agency for Research on Cancer)**

Not Listed

#### **Irritation**

Not expected to produce serious eye or skin irritation.

#### **Sensitization**

Not expected to be a skin or respiratory sensitizer.

#### **Mutagenic Effects**

No known or anticipated mutagenic effects

#### **Developmental Effects**

No known or anticipated developmental effects

#### **Target Organ Effects**

Respiratory system Eyes Skin

#### **Corrosivity**

No known or anticipated corrosive properties.

#### **Neurological Effects**

No known or anticipated neurological effects

#### **Reproductive Effects**

No known or anticipated reproductive effects.

#### **Teratogenicity**

No known or anticipated teratogenic effects

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### **Ecotoxicity effects**

Contains no substances known to be hazardous to the environment. Contains no substances known to be not degradable in waste water treatment plants.

#### **Persistence/Degradability**

Readily biodegradable.

#### **Bioaccumulation/ Accumulation**

Not applicable.

#### **Mobility**

Soluble in water.

## 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	NZLoC
Glucose	Yes	Yes	No	Yes 200-075-1	No	Yes	Yes (8)-46	Yes	Yes	Yes KE-17727	Yes
Water	Yes	Yes	No	Yes 231-791-2	No	Yes	No	Yes	Yes	Yes KE-35400	Yes

#### **Legend**

TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA). DSL - Domestic Substance List (Canada). NDSL - Non Domestic Substances List (Canada). EINECS - European Inventory of Existing Commercial Chemical Substances (EU). ELINCS - European List of Notified Chemical Substances (EU). AICS - Australian Inventory of Chemical Substances (Australia). ENCS - Existing and New Chemical Substances (Japan). ISHL - Industrial Health and Safety Law (Japan). CHINA - Chinese Inventory of Existing Chemical Substances (China). PICCS - Inventory of Chemicals and Chemical Substances (Philippines). KECL - Korean Existing and Evaluated Chemical Substances (Korea). NZLoC - New Zealand Inventory of Chemicals (New Zealand).

## **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.

#### **SARA 302**

Section 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 302.

#### **SARA 311/312 Hazardous Categorization**

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

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product is not known to contain any HAPS.

### **State Regulations**

#### **California Proposition 65**

Proposition 65 chemicals are not expected to be found in this product above those naturally present in their agricultural source. Proposition 65 exempts naturally occurring listed chemicals from an obligation to label.

**State Right-to-Know**

No known components subject to "Right-To-Know" legislation in the following States: Massachusetts. Minnesota. New Jersey. Pennsylvania.

**Canada****WHMIS Product Classification**

Exempt: Food Product per Hazardous Products Act Part II Controlled Products Section 12.

**WHMIS Ingredient Disclosure List IDL**

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

**(NPRI) Canadian National Pollutant Release Inventory**

No known component is listed on NPRI.

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**

No information available.

<b>16. OTHER INFORMATION</b>
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<b>Prepared By:</b>	ADM Corn Processing
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<b>Revision Number:</b>	1
<b>Revision Summary</b>	(M)SDS sections updated. This data sheet contains changes from the previous version in section(s) 2, 8, 11. This version replaces all previous versions.

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 (M)SDS**