Ingredion

Safety Data Sheet

Material Name: CERELOSE® Dextrose 020010

Section 1 - IDENTIFICATION

Material Name: CERELOSE® Dextrose 020010

Trade Names/Synonyms

DEXTROSE; DEXTROSE MONOHYDRATE

Recommended Use

Foodstuffs; food application; Used in food product or food mixture

Manufacturer Information

Ingredion Incorporated
5 Westbrook Corporate Center
Westchester, IL 60154 USA
Product Info/Customer Service: 708-551-2600
Fax: 708-551-2510
Business Hours: Mon - Fri, 7:30 a.m. - 5:00 p.m. (CST)

Ingredion Canada Incorporated
1600-90 Burnhamthorpe Road West
Mississauga, ON L5B 0H9 Canada
Product Info/Customer Service: (905) 281-7950
Fax: (905) 281-7951
Business Hours: Mon - Fri, 7:30 a.m. - 6:00 p.m. (EST)

24-Hour Emergency Telephone Number
1-800-424-9300 (CHEMTREC)

Section 2 - HAZARDS IDENTIFICATION

Classifications are accordance to the GHS classification requirements under 29 CFR 1910.1200

Combustible dust.

Signal Word

WARNING

Hazard Statement(s)

May form combustible dust concentrations in air

Precautionary Statement(s)

Prevention

None needed according to classification criteria.

Response

None needed according to classification criteria.

Storage

None needed according to classification criteria.

Disposal

Dispose in accordance with all applicable regulations.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component	Percent
50-99-7	D-Glucose	100

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Particulates not otherwise classified (PNOC).

Section 4 - FIRST AID MEASURES

Description of Necessary Measures

Inhalation

If adverse effects occur, remove to uncontaminated area. Get medical attention, if needed.

Skin

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed.

Eyes

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention, if needed.

Ingestion

If a large amount is swallowed, get medical attention.

Most Important Symptoms/Effects

Acute

No information on significant adverse effects.

Delayed

No information on significant adverse effects.

Section 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Regular dry chemical, carbon dioxide, water spray

Large fires: Use regular foam or flood with fine water spray.

Unsuitable Extinguishing Media

High-pressure water streams

Specific Hazards Arising from the Chemical

Combustible dust. High concentrations of product dust from this product may burn explosively if ignited by static charges or other ignition sources. The conditions under which this may occur are not readily predictable. Avoid flames, sparks, and other sources of ignition. Ground any equipment used in handling. Combustion products: carbon monoxide, smoke, irritating combustion byproducts.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Special Protective Equipment and Precautions for Firefighters

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

See Section 8 for personal protection information.

Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Avoid heat, flames, sparks and other sources of ignition. Eliminate all ignition sources if safe to do so. All equipment used when handling the product must be grounded. Sweep up or gather material and place in appropriate container for disposal. If respirable dusts are generated, respiratory protection may be needed. Avoid release to the environment.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat, sparks and flame. Eliminate all sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions.

Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep container tightly closed. Store locked up. Store in a clean, dry place. Protect from light. Avoid generating dust. Avoid contact with temperatures above >90°F (>32°C). Shelf life is 3 years. Keep separated from incompatible substances.

Incompatibilities oxidizing materials

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

D-Glucose (50-99-7)

ACGIH: 10 mg/m3 TWA (inhalable particles, recommended); 3 mg/m3 TWA (respirable particles, recommended, related to Particulates not otherwise classified (PNOC))

OSHA (US): 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction, related to Particulates not otherwise classified (PNOC))

Appropriate Engineering Controls

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

If eye contact is likely, wear chemical resistant safety goggles.

Skin Protection

Protective clothing is not required under normal conditions.

Glove Recommendations

Protective gloves are not required under normal conditions.

Respiratory Protection

Respiratory protection is not required under normal conditions of use.
If respirable dusts are generated, respiratory protection may be needed.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Crystalline powder	**Appearance:**	Not available
Color:	white	**Physical Form:**	Crystalline powder
Odor:	No detectable foreign odor	**Odor Threshold:**	Not available
Taste:	Clean, sweet taste	**pH:**	Not available
Melting Point:	146°C	**Boiling Point:**	Not available
Flash Point:	286.7 °C	**Evaporation Rate:**	Not available
LEL:	Not available	**UEL:**	Not available
Vapor Pressure:	Not available	**Vapor Density (air = 1):**	Not available
Bulk Density:	Not available	**Density:**	57 lbs./cu.ft.
Specific Gravity (water = 1):	Not available	**Water Solubility:**	Soluble
Log KOW:	Not available	**Coeff. Water/Oil Dist:**	Not available
Auto Ignition:	Not available	**Viscosity:**	Not available
Molecular Weight:	180.15 [g/mol]	**Molecular Formula:**	Not available
Moisture:	8.5%	**Minimum Ignition Temperature:**	Not available
Minimum Ignition Energy:	Not available		

Solvent Solubility

Soluble: water, hot acetic acid, pyridines, aniline

Very Slightly Soluble: absolute alcohol, acetone, ether

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid generating dust. Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

Incompatible Materials

Oxidizing materials

Decomposition Products

Oxides of carbon, irritating gases, smoke

Section 11 - TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

25800 mg/kg oral-rat LD50

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

Acute Toxicity Level

D-Glucose (50-99-7)

Non Toxic: ingestion

Information on Likely Routes of Exposure

Inhalation

Inhalation of dust may irritate upper respiratory tract.

Ingestion

No data available.

Skin Contact

No data available.

Eye Contact

Overexposure to eyes may also cause immediate discomfort, pain, and mild but transient corneal injury.

Immediate Effects

No information on significant adverse effects.

Delayed Effects

No information on significant adverse effects.

Carcinogenicity

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

Other Hazards

No information is available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Avoid release to the environment.

Component Analysis - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Persistence and Degradability

This material is expected to biodegrade.

Bioaccumulative Potential

No data available.

Mobility

No data available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable regulations.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information

Not regulated as a hazardous material.

ICAO Information

Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

U.S Federal Regulations

FDA: Classified as Generally Regarded as Safe (GRAS)

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or applicable to OSHA process safety management requirements.

SARA 311/312 Hazardous Categories

Acute Health: No **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

U.S. State Regulations

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

Not regulated under California Proposition 65

Canada Regulations

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

WHMIS CLASSIFICATION: D2B - Irritation.

CFDA: Product is regulated as standard foodstuff.

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL. The components of this product are either not listed on the IDL or are present below the threshold limit listed on the IDL.

Inventory List

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
D-Glucose	50-99-7	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

Additional Regulatory Information

EC No. 200-075-1

Section 16 - OTHER INFORMATION

Summary of Changes

New MSDS: 6/10/2013

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSL - Domestic Substances List; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act;

STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

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