



## Safety Data Sheet

Material Name MALTISWEET® MALTITOL SYRUP/SOLUTION FCC/NF (All Grades)

SDS ID: INGR-013

### Section 1 - IDENTIFICATION

**Material Name:** MALTISWEET® MALTITOL SYRUP/SOLUTION FCC/NF (All Grades)

**Trade Names/Synonyms**

Hydrogenated glucose syrup

**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**

No classification is assigned, based on classification criteria. Review the entire data sheet for any additional information which did not result in a GHS classification.

**GHS LABEL ELEMENTS**

**Symbol(s)**

None needed according to classification criteria.

**Signal Word**

None needed according to classification criteria.

**Hazard Statement(s)**

None needed according to classification criteria.

**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.

**Hazard(s) Not Otherwise Classified**

This is an aqueous solution of combustible dust material that should not be allowed to dry/evaporate as the dust will be combustible.

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## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component	Percent
68425-17-2	Syrups, hydrolyzed starch, hydrogenated	75-85
7732-18-5	Water	15-25

## 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. DO NOT induce vomiting.

### 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.

### Specific Hazards Arising from the Chemical

This is an aqueous solution of combustible dust material that should not be allowed to dry/evaporate as the dust will be combustible.

### Hazardous Combustion Products

**Combustion:** carbon monoxide, carbon dioxide, low molecular weight hydrocarbons

### 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 fire fighting 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 heat, flames, sparks and other sources of ignition. Eliminate all ignition sources if safe to do so. Stop leak if possible without personal risk. **Small spills:** Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Avoid release to the environment.

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## Section 7 - HANDLING AND STORAGE

### Precautions for Safe Handling

Observe good hygiene and safety practices when handling this product. Avoid contact with skin and eyes. Wash thoroughly after handling.

### Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Store between 60 °F and 100 °F (16 °C and 38 °C). Keep container tightly closed and in a cool, well-ventilated place. Shelf life is 2-3 year. Keep separated from incompatible substances.

**Incompatibilities** oxidizing materials

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

ACGIH, NIOSH, EU, OSHA (US) and Mexico have not developed exposure limits for any of this product's components.

### Appropriate Engineering Controls

Ensure compliance with applicable exposure limits.

### 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 ventilation is not sufficient to effectively prevent buildup of mists or vapors, appropriate respiratory protection must be provided.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid	<b>Appearance:</b>	Clear, colorless, syrupy liquid
<b>Color:</b>	colorless	<b>Physical Form:</b>	liquid
<b>Odor:</b>	No detectable foreign odor	<b>Odor Threshold:</b>	Not available
<b>Taste:</b>	Clean, sweet taste	<b>pH:</b>	5.5-7.5
<b>Melting Point:</b>	Not available	<b>Boiling Point:</b>	Not available
<b>Flash Point:</b>	Not available	<b>Evaporation Rate:</b>	Not available
<b>LEL:</b>	Not available	<b>UEL:</b>	Not available
<b>Vapor Pressure:</b>	Not available	<b>Vapor Density (air = 1):</b>	Not available
<b>Bulk Density:</b>	Not available	<b>Density:</b>	Not available
<b>Specific Gravity (water = 1):</b>	Not available	<b>Water Solubility:</b>	Not available
<b>Log KOW:</b>	Not available	<b>Coeff. Water/Oil Dist:</b>	Not available
<b>Auto Ignition:</b>	Not available	<b>Viscosity:</b>	1,700 cps @25C
<b>Volatility:</b>	Not available	<b>Molecular Weight:</b>	Not available
<b>Molecular Formula:</b>	Not available	<b>Moisture:</b>	Not available
<b>Minimum Ignition Temperature:</b>	Not available	<b>Minimum Ignition Energy:</b>	Not available

### Solvent Solubility

**Soluble:** No information is available.

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## Conductivity

Not available

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

### Incompatible Materials

oxidizing materials

### Hazardous Decomposition

**Combustion:** carbon monoxide, carbon dioxide, low molecular weight hydrocarbons

## Section 11 - TOXICOLOGICAL INFORMATION

### Acute and Chronic Toxicity

#### Component Analysis - LD50/LC50

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

#### Information on Likely Routes of Exposure

##### Inhalation

No effects expected.

##### Ingestion

Ingestion of large amounts of product may produce gastrointestinal irritation.

##### Skin Contact

Prolonged or repeated exposure may cause irritation.

##### Eye Contact

May cause mild irritation.

##### 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.

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## 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

#### 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: Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

#### 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
Syrups, hydrolyzed starch, hydrogenated	68425-17-2	Yes	DSL	EIN	Yes	No	No	Yes	Yes	Yes
Water	7732-18-5	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes

#### Additional Regulatory Information

EC No. 270-337-8

## Section 16 - OTHER INFORMATION

### Summary of Changes

New SDS: 01/17/14

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## 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; CFR = Code of Federal Regulations.; CN - China; 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; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; Kow - Octanol/water partition coefficient; JP - Japan; KR - Korea; LC50 - Lethal Concentration, 50%; LD50 - Lethal Dose, 50%; LEL - Lower Explosive Limit; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; SARA - Superfund Amendments and Reauthorization Act; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States; WHMIS - Ingredient Disclosure List

## Other Information

The attached data has been compiled from sources which Ingredion Incorporated and the Ingredion group of companies, believe to be dependable and, to our knowledge and belief is accurate. However, Ingredion Incorporated and the Ingredion group of companies cannot make any warranty or representation respecting the accuracy or completeness of the data. We assume no responsibility for any liability or damages relating thereto, or for advising you regarding the protection of your employees, customers, or others. You should make your own tests to determine the applicability of such information to, or the suitability of any products for your specific use. Ingredion Incorporated and the Ingredion group of companies expressly disclaims all warranties, expressed or implied, including but not limited to, warranties of merchantability, accuracy, fitness for use or for a particular purpose, and noninfringement. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to sales of products by Ingredion Incorporated and the Ingredion group of companies. The INGREDION mark and logo are trademarks of the Ingredion group of companies.

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