

# FRUT

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 2016-10-07

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Version: 1.0

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Substance  
Product name : FRUT  
Product code : Not Available  
Substance name : Fructose

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Sugar Powder Reference Material, for laboratory use only

#### 1.3. Details of the supplier of the safety data sheet

National Research Council Canada  
1200 Montreal Road  
Ottawa, K1A 0R6 - Canada  
T 613-993-2359



National Research  
Council Canada

Conseil national de  
recherches Canada

#### 1.4. Emergency telephone number

Emergency number : CANUTEC 1-613-996-6666

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS classification

Comb. Dust

#### 2.2. Label elements

##### GHS labelling

Signal word (GHS) : Warning  
Hazard statements (GHS) : May form combustible dust concentrations in air.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

None by OSHA Hazcom 2012 and HPR WHMIS 2015 criteria.

#### 3.2. Mixtures

Not applicable

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.  
First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Call a physician if irritation develops and persists.  
First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.  
First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Powder, water spray, foam, carbon dioxide.
- Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible dust. Products of combustion may include, and are not limited to: oxides of carbon.

### 5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Avoid generating dust. Dust may form flammable mixture with air.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Eliminate sources of ignition. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air).

### 6.2. Methods and material for containment and cleaning up

- For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation. Use only non-sparking tools.

### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from sources of ignition. Avoid contact with skin and eyes. Do not swallow. Avoid generating and breathing dust. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc., is not recommended. Use only in well-ventilated areas. Handle and open container with care. Use non-sparking tools. Do not eat, drink or smoke when using this product.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : It is recommended that the material be stored tightly closed in a cool, clean and dark location. The ampoules should be opened only in a clean area with precautions taken against contamination during sampling.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Appropriate engineering controls : It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection : Wear suitable gloves.

Eye protection : Safety glasses or goggles are recommended when using product.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : None necessary under normal conditions of use.

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline powder

Colour : White

Odour : No data available

Odour threshold : No data available

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Relative evaporation rate (butylacetate=1) : No data available

Flammability (solid, gas) : Combustible Dust

Explosive limits : No data available

Explosive properties : No data available

Oxidising properties : No data available

Vapour pressure : No data available

Relative density : No data available

Relative vapour density at 20 °C : No data available

Solubility : No data available

Partition coefficient n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

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Viscosity	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2. Chemical stability

Stable under normal storage conditions. Combustible dust – avoid generating dust. Dust may form flammable mixture with air.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

Sources of ignition. Heat.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified.

FRUT	
LD50 oral rat	No data available
LD50 dermal rabbit	No data available
LC50 inhalation rat	No data available

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
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.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : No additional information available.

#### 12.2. Persistence and degradability

##### FRUT

Persistence and degradability	Not established.
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#### 12.3. Bioaccumulative potential

##### FRUT

Bioaccumulative potential	Not established.
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

### SECTION 14: Transport information

#### Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT and TDG

Not regulated for transport

#### Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

#### 15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

#### 15.2. US State regulations

No additional information available

### SECTION 16: Other information

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Prepared by : Nexreg Compliance Inc.

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### **DISCLAIMER:**

*The information provided on this Safety Data Sheet 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.*

*This material is for research and experimental applications only. It is not intended for food, drug, household, agricultural, or cosmetic use. Its use must be supervised by technically qualified individuals with experience in the handling of potentially hazardous chemicals. Apart from the solvent in this product (if applicable), the hazardous components present in the solution are at such low concentrations that exact determination of degree of hazard is not warranted and would be misleading. We shall not be held liable for any damage resulting from handling or from contact with the above product.*