According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 05.10.2017

### **D-Fructose**

## **SECTION 1: Identification**

#### Product identifier

Product name: D-Fructose Product code: FR1030

# Recommended use of the product and restriction on use

Relevant identified uses: Laboratory Chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

### Manufacturer or supplier details

Manufacturer: United States AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

# Emergency telephone number: Canada ChemTel: (24-hour) +1(800)255-3924 +1(813)248-0585 (International)

# **SECTION 2: Hazard identification**

GHS classification: Not a hazardous substance or mixture

# Label elements

Hazard pictograms: None

Signal word: None

Hazard statements: None

Precautionary statements: None

Hazards not otherwise classified: None

### **SECTION 3: Composition/information on ingredients**

Identification	Name	Weight %
CAS number: 57-48-7	D-Fructose	98

## Additional Information: None

SECTION 4: First-aid measures	

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 05.10.2017

### **D-Fructose**

### **Description of first-aid measures**

## **General notes:**

Not determined or not available.

## After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

### After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

## After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention

## After ingestion:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

# Most important symptoms and effects, both acute and delayed

### Acute symptoms and effects:

Not determined or not available.

# Delayed symptoms and effects:

Not determined or not available.

## Immediate medical attention and special treatment

### Specific treatment:

Not determined or not available.

### Notes for the doctor:

Not determined or not available.

# **SECTION 5: Fire-fighting measures**

### Extinguishing media

# Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

# Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

# Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

# Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

## **SECTION 6: Accidental release measures**

# Personal precautions, protective equipment and emergency procedures:

Wear protective eye wear, gloves and clothing

According to Canadian Hazardous Products Regulations and WHMIS 2015

### Initial preparation date: 05.10.2017

### **D-Fructose**

Ensure adequate ventilation Ensure air handling systems are operational

### **Environmental precautions:**

Should not be released into the environment Prevent from reaching drains, sewer or waterway

## Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

### **Reference to other sections:**

Not determined or not applicable.

## **SECTION 7: Handling and storage**

### Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor.

## Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

## **SECTION 8: Exposure controls/personal protection**

Only those substances with limit values have been included below.

### **Occupational Exposure limit values:**

No occupational exposure limits noted for the ingredient(s).

# **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Not determined or not applicable.

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

### Personal protection equipment

### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

## Skin and body protection:

Select glove material impermeable and resistant to the substance.

## **Respiratory protection:**

When necessary, use NIOSH-approved breathing equipment.

### General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing.

### **SECTION 9: Physical and chemical properties**

## Information on basic physical and chemical properties

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 05.10.2017

## **D-Fructose**

	1
Appearance (physical state, color):	White crystalline powder
Odor:	Odorless
Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.
Melting/Freezing point:	103-105 °C
Boiling point/range:	Not determined or not available.
Flash point:	Not determined or not available.
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	Not determined or not available.
Relative density:	Not determined or not available.
Solubilities:	Not determined or not available.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	103-105 °C
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

# **Other information**

# SECTION 10: Stability and reactivity

### **Reactivity:**

Does not react under normal conditions of use and storage.

### **Chemical stability:**

Stable under normal conditions of use and storage.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

## **Conditions to avoid:**

None known.

## Incompatible materials:

None known.

## Hazardous decomposition products:

None known.

## **SECTION 11: Toxicological information**

# Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 05.10.2017

#### **D-Fructose**

Product data: No data available. Substance data: No data available.

## Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

## Serious eye damage/irritation

**Assessment:** Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

# Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

**International Agency for Research on Cancer (IARC):** None of the ingredients are listed. **National Toxicology Program (NTP):** None of the ingredients are listed.

# Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

# Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data: No data available.

# Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

# Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 05.10.2017

### **D-Fructose**

## **SECTION 12: Ecological information**

### Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data: No data available.

## Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

## Persistence and degradability

**Product data:** No data available. **Substance data:** No data available.

## **Bioaccumulative potential**

**Product data:** No data available. **Substance data:** No data available.

## Mobility in soil

Product data: No data available. Substance data: No data available.

Other adverse effects: No data available.

### **SECTION 13: Disposal considerations**

## **Disposal methods:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

# **SECTION 14: Transport information**

# **Canadian Transportation of Dangerous Goods (TDG)**

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

## International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 05.10.2017

## **D-Fructose**

## International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
Bulk Name	None
Ship type	None
Pollution category	None

## SECTION 15: Regulatory information

### **Canada regulations**

Domestic substances list (DSL):

57-48-7 D-Fructose

Listed

Non-domestic substances list (NDSL): Not determined.

## **SECTION 16: Other information**

### Abbreviations and Acronyms: None

### **Disclaimer:**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

Initial preparation date: 05.10.2017

# End of Safety Data Sheet