# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

Page 1/7
Revision Date 25-Apr-2024
Version 3

ALFAAL10688

# 1,2-O-Isopropylidene-alpha-D-glucofuranose

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 1,2-O-异亚丙基-α-D-呋喃葡萄糖

Product Description: 1,2-O-Isopropylidene-alpha-D-glucofuranose

Cat No.: L10688

Synonyms 1,2-O-Isopropylidene-alpha-D-glucof; alpha-D-Glucofuranose, 1,2-O-(1-methylethylidene)-

 CAS No
 18549-40-1

 Molecular Formula
 C9 H16 O6

**Supplier** Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

Emergency Telephone Number For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals. Uses advised against No Information available

## **SECTION 2. HAZARD IDENTIFICATION**

Physical StateAppearanceOdorPowder SolidWhiteOdorless

# **Emergency Overview**

The product contains no substances which at their given concentration are considered to be hazardous to health.

## Classification of the substance or mixture

Based on available data, the classification criteria are not met

## **Label Elements**

None required

## **Physical and Chemical Hazards**

None identified.

## **Health Hazards**

The product contains no substances which at their given concentration are considered to be hazardous to health.

## **Environmental hazards**

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

# SAFETY DATA SHEET

Page 2/7 Revision Date 25-Apr-2024

1,2-O-Isopropylidene-alpha-D-glucofuranose

This product does not contain any known or suspected endocrine disruptors.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %		
.alphaD-Glucofuranose, 1,2-O-(1-methylethylidene)-	18549-40-1	98		

# **SECTION 4. FIRST AID MEASURES**

## **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### **Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air.

## Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If possible drink milk afterwards.

## Most important symptoms and effects

No information available.

## Self-Protection of the First Aider

No special precautions required.

## **Notes to Physician**

Treat symptomatically.

## **SECTION 5. FIRE-FIGHTING MEASURES**

## **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol resistant foam.

## Extinguishing media which must not be used for safety reasons

No information available.

# **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

## Methods for Containment and Clean Up

# SAFETY DATA SHEET

Page 3/7 Revision Date 25-Apr-2024

1,2-O-Isopropylidene-alpha-D-glucofuranose

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7. HANDLING AND STORAGE**

## Handling

Avoid contact with skin and eyes. Avoid contact with skin and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance. Wash thoroughly after handling.

## Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep refrigerated.

## Specific Use(s)

Use in laboratories

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## **Control Parameters**

## **Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### **Exposure Controls**

#### **Engineering Measures**

None under normal use conditions. .

## Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	See manufacturers	-	EN 374	(minimum requirement)
Neoprene	recommendations			
Natural rubber				
PVC				

Inspect gloves before use.

Skin and body protection

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection	No protective equipment is needed under normal use conditions.

Long sleeved clothing

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

# SAFETY DATA SHEET

Page 4/7 Revision Date 25-Apr-2024

1,2-O-Isopropylidene-alpha-D-glucofuranose

\_\_\_\_\_

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance White

Physical State Powder Solid

**Odor** Odorless

Odor Threshold No data available

**pH** No information available

Melting Point/Range 159 - 161 °C / 318.2 - 321.8 °F

Softening Point No data available

Boiling Point/Range No information available

Flash Point No information available Method - No information available

Evaporation Rate Not applicable Solid

Flammability (solid,gas) No information available

**Explosion Limits** No data available

Vapor Pressure No information available

Vapor Density Not applicable Solid

Specific Gravity / Density
Bulk Density
Water Solubility
Solubility in other solvents
No data available
No data available
No information available
No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature No data available Decomposition Temperature No data available

Viscosity Not applicable Solid

**Explosive Properties**Oxidizing Properties
No information available
No information available

Molecular Formula C9 H16 O6 Molecular Weight 220.22

## **SECTION 10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions.

Hazardous ReactionsNo information available.Hazardous PolymerizationNo information available.

Conditions to Avoid Incompatible products.

Materials to avoid Strong oxidizing agents. Oxidizing agent.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information**No acute toxicity information is available for this product

(a) acute toxicity;

ALFAAL10688

# SAFETY DATA SHEET

Page 5/7 Revision Date 25-Apr-2024

1,2-O-Isopropylidene-alpha-D-glucofuranose

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

RespiratoryNo data availableSkinNo data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable

Solid

Symptoms / effects,both acute and No information available

delayed

**SECTION 12. ECOLOGICAL INFORMATION** 

Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

Persistence and Degradability

No information available

Bioaccumulative Potential No information available

Mobility in soil No information available

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

**SECTION 13. DISPOSAL CONSIDERATIONS** 

Waste from Residues/Unused

Products

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

ALFAAL10688

# SAFETY DATA SHEET

Page 6/7 Revision Date 25-Apr-2024

1,2-O-Isopropylidene-alpha-D-glucofuranose

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

## **SECTION 14. TRANSPORT INFORMATION**

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

Special Precautions for User No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

## **International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)		TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
.alphaD-Glucofurano se, 1,2-O-(1-methylethylid ene)-		-	Х	-	242-420-9	X	-	-	-		1	-

# **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 25-Apr-2024

**Revision Summary** New emergency telephone response service provider.

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

## Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b)
Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances

ALFAAL10688

# SAFETY DATA SHEET

Page 7/7 Revision Date 25-Apr-2024

## 1,2-O-Isopropylidene-alpha-D-glucofuranose

**KECL** - Korean Existing and Evaluated Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

PNEC - Predicted No Effect Concentration

POW - Partition coefficient Octanol:Water

EC50 - Effective Concentration 50%

IARC - International Agency for Research on Cancer

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration **PBT** - Persistent, Bioaccumulative, Toxic

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

vPvB - very Persistent, very Bioaccumulative

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**MARPOL** - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate
VOC - (Volatile Organic Compound)

# Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## **Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of Safety Data Sheet** 

\_\_\_\_\_