

## Material Safety Data Sheet Isomalt

### Section 1 - Product Identification

Product Name : Isomalt  
Chemical Formula :  $C_{24}H_{48}O_{22}$   
Company Identification : Tradeasia International Pte. Limited  
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### Section 2 – Hazards Identification

#### Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

##### Classification (67/548/EEC or 1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

#### GHS Label Elements

Pictograms: N/A

Signal word: N/A

#### Hazard and precautionary statements

None

**Other hazards:** Dust may form explosive mixture in air.

### Section 3 – Composition/Information on Ingredients

**Common Name** Isomalt  
**Synonym(s)** Hydrogenated Isomaltulose; Hydrogenated Palatinose  
**Description** Mixture of hydrogenated mono- and disaccharides, of this  $\geq 86\%$  alphaD-glucopyranosyl-1,6-D-sorbitol (1,6-GPS) and alpha-D-glucopyranosyl-1,1- D-mannitol (1,1-GPM)  
**CAS Number** 64519-82-0

### Section 4 – First-Aid Measures

#### Description of first-aid measures

**General advice:** The product is not toxic.

**Inhalation:** Fresh air. If symptoms persist, call a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Rinse thoroughly with plenty of water, also under the eyelids.

If eye irritation persists, consult a specialist.

**Ingestion:** If symptoms persist, call a physician.

**Most important symptoms and effects, both acute and delayed**

**Symptoms:** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically.

## Section 5 – Fire Fighting Measures

**Extinguishing media**

**Suitable extinguishing media:** Water Spray; Sand

**Special hazards arising from the substance or mixture**

**Specific hazards during firefighting:** Combustible material. Risk of dust explosion.

Development of hazardous combustion gases or vapors possible in the event of fire.

**Advice for firefighters**

**Special protective equipment for firefighters:** In the event of fire, wear self-contained breathing apparatus.

**Further information:** Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

## Section 6 – Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures**

**Personal precautions:** Avoid breathing dust.

**Environmental precautions**

**Environmental precautions:** No special environmental precautions required.

**Methods and materials for containment and cleaning up**

**Methods for cleaning up:** Take up dry (mechanical). Forward for disposal. Clean up affected area. Avoid dust formation.

**Reference to other sections:** Refer to protective measures listed in sections 7 and 8.

## Section 7 – Handling and Storage

**Precautions for safe handling**

**Advice on safe handling:** Avoid dust formation. Do not breathe dust.

**Advice on protection against fire and explosion:** Take precautions against dust explosion.

Keep workplaces clean, avoid dust accumulation. Keep away from sources of ignition - No smoking.

Observe explosion protection regulations!

Dust explosion class: St1

### Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers:** Keep in a dry place. Store at room temperature

## Section 8 – Exposure Controls/Personal Protection

**Control parameters:** Contains no substances with occupational exposure limit values.

### Exposure controls

#### Personal protective equipment

**Respiratory protection:** Respirator must be worn if exposed to dust.

Suitable mask with particle filter P1 (EN 143)

**Hand protection:** For prolonged or repeated contact use protective gloves.

**Eye protection:** Safety glasses (in case of dust exposure)

**Hygiene measures:** Wash hands before breaks and at the end of workday.

**Protective measures:** Do not breathe dust. When using do not smoke.

### Environmental exposure controls

**General advice:** No special environmental precautions required.

## Section 9 – Physical and Chemical Properties

### Information on basic physical and chemical properties

**Form:** Crystalline, powder, granular

**Color:** Off-white

**Odor:** Nearly odorless (slight product specific odor, sweetish)

**Flash point:** No data available

**Ignition temperature:**  $\geq 420^{\circ}\text{C}$

**Lower explosion limit:** Dust may form explosive mixture in air.

60 g/m<sup>3</sup> (grainsize: 90 % < 50 µm)

**Upper explosion limit:** No data available

### Minimum ignition energy (MIE)

Median	-	MIE
190 µm	-	100 - 300 mJ
370 µm	-	300 - 1000 mJ

**Auto-ignition temperature:** Not applicable

**pH (100.0 g/l) :** ca. 3.5 - 6.0 (at 20°C)

**Melting point/range:** ca. 140 - 165°C

**Boiling point/boiling range:** no data available

**Bulk density:** ca. 320 - 920 kg/m<sup>3</sup> (Depending on particle size)

**Water solubility:** ca. 270 - 485 g/l (at 20 °C)

## Section 10 – Stability and Reactivity

**Reactivity:** No decomposition if stored and applied as directed.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Hazardous reactions: Like most organic material in powder form, the product can form explosive dust-air mixtures when finely dispersed in air.

**Conditions to avoid**

**Conditions to avoid:** Strong heating (decomposition).  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

**Incompatible materials:** No data available

**Hazardous decomposition products**

**Thermal decomposition:** No decomposition if stored and applied as directed.

## Section 11 – Toxicological Information

**Information on toxicological effects**

**Acute toxicity**

**Acute oral toxicity:** LD50 Oral: no data available

**Skin corrosion/irritation**

**Skin irritation:** No skin irritation

**Serious eye damage/eye irritation**

**Eye irritation:** No eye irritation  
Mechanical irritation of the eyes is possible.

**Respiratory or skin sensitization**

**Sensitization:** No sensitizing effects known.

**Target Organ Systemic Toxicant - Single exposure:** The substance or mixture is not classified as specific target organ toxicant, single exposure.

**Target Organ Systemic Toxicant - Repeated exposure:** The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Further information:** The product is an evaluated and as safe classified food additive (E953).

By the responsible "Joint Expert Committee on Food Additives" (JECFA, an advisory body of WHO/FAO) an ADI (acceptable daily intake for man) for ISOMALT was not established (ADI: "not specified").

ADI "not specified" means that, on the basis of the available data (chemical, biochemical, toxicological, and other) the intake of the substance arising from its use (at the levels necessary to achieve the desired effect) does not represent a hazard to health.

## Section 12 – Ecological Information

**Toxicity**

**Toxicity to fish:** LC50: No data available

#### **Persistence and degradability**

**Biodegradability:** Anaerobic degradability: > 90 % (COD)

#### **Bioaccumulative potential**

**Bioaccumulation:** No data available

#### **Mobility in soil**

**Mobility:** No data available

#### **Results of PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

#### **Other Adverse Effects**

**Additional ecological information:** We have no quantitative data concerning the ecological effects of this product. Ecological injuries are not known or expected under normal use.

### **Section 13 – Disposal Considerations**

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

### **Section 14 – Transport Information**

Not classified as dangerous in the meaning of transport regulations.

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.

### **Section 15 – Regulatory Information**

**Safety, health, and environmental regulations/legislation specific for the substance or mixture**

**Major Accident Hazard Legislation:** Not covered by the German StörfallV.

**Chemical Safety Assessment:** A Chemical Safety Assessment is not required for this substance.

### **Section 16 : Additional Information**

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.