




<b>Safety Data Sheets (SDS)</b>	Number:051402005/01		181402002/00
Scope: Farhikhtegan Zarnam Industrial and Research Group	Date:2023/02/26		

### 1- Product and Company Identification

<b>Trade Name</b>	<b>Corn starch</b>
<b>Company name and address</b>	<b>Zar grain refinery, Hashtgerd city, Karaj-Qazvin freeway, Alborz, Iran</b>
<b>Phone</b>	<b>026-43212000</b>
<b>Fax</b>	<b>026-43212027</b>
<b>Email</b>	<b>info@zarfructose.com</b>

### 2- Hazards Identification

<b>Corrosive</b>	<b>Health hazard</b>	<b>Flammable</b>	<b>Toxic</b>	<b>Hazard diamond</b>
-	-		-	
<b>Oxidizing</b>	<b>Explosive</b>	<b>Environmental hazard</b>	<b>Harmful</b>	<b>Compressed Gas</b>
-	-	-	-	-


<b>Eye Contact</b>	<b>May cause slight irritation</b>
<b>Skin Contact</b>	<b>May cause slight skin irritation</b>
<b>Ingestion</b>	<b>Health injuries are not known or expected under normal use</b>
<b>Inhalation</b>	<b>May cause irritation of respiratory tract</b>
<b>Risk of Fire</b>	<b>Fine dust dispersed in air may ignite</b>
<b>Risk of Explosion</b>	<b>Formation of dust cloud of the substance can lead to explosive atmospheres.</b>
<b>Environmental hazard</b>	<b>-</b>


### 3- Composition / Information on Ingredients

<b>Chemical Name</b>	<b>Synonyms</b>	<b>(CAS) Number and other Unique Identifiers</b>	<b>Chemical Formula</b>	<b>Percent</b>
<b>Corn Starch</b>	<b>Maize Starch</b>	<b>9005-25-8</b>	<b>(C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>)<sub>n</sub></b>	<b>100</b>


### 4- First Aid Measures

<b>Eye Contact</b>	<b>Carefully rinse with water for a few minutes.</b>	
<b>Skin Contact</b>	<b>Rinse with water.</b>	

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<b>Inhalation</b>	Move to fresh air	
<b>Ingestion</b>	Health injuries are not known or expected under normal use. In case of having ingested an excess or if there is irritation, do not induce vomiting. In case of unconscious person, do not administer anything orally. In case of persistent discomfort, receive immediate medical attention and, if necessary, special treatment.	
<b>Medical Information</b>	-	


#### 5- Fire Fighting Measures

<b>Extinguishing Media</b>	Water, foam, water mist, carbon dioxide.	
<b>Special Hazards Arising from the Chemical</b>	Fine dust dispersed in the air may ignite. The risk of explosion should be prevented by avoiding the accumulation of dust.	
<b>Special Protective Equipment and Precautions For Fire Fighters</b>	As in any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.	
<b>Other Information</b>	-	


#### 6- Accidental Release Measures


<b>Small Spill</b>	Use a simple mask to protect dust, gloves and eye protection equipment. Contain the material in appropriate container or containers. Eliminate possible sources of ignition.
<b>Large Spill</b>	Lift and dispose carefully without creating dust. Sweep / vacuum and dispose in a suitable container. Dust collectors must be equipped with safety devices that prevent or reduce the risk of explosion.

#### 7- Handling and Storage

<b>Precautions For Safe Handling:</b>	Use personal protective equipment for handling (dust mask, gloves and lenses). Use with adequate ventilation. Avoid dust formation. Keep containers closed when not in use. Avoid any possible source of ignition. It is recommended to wash your hands before and after handling the product.	
<b>Storage:</b>	Fine dust with ability to form a cloud, which presents a danger of explosion. Keep away from sources of ignition. Store preferably in a cool and dry place, with adequate ventilation. Keep away from incompatible materials such as: oxidizing chemicals, acids, iodine and alkalis. Avoid the formation of explosive atmospheres.	

#### 8- Exposure Controls/Personal Protection

<b>Skin Protection</b>	Use nitrile or rubber protective gloves.	
<b>Eye Protection</b>	Safety glasses with side-shields	
<b>Body Protection</b>	Long sleeved clothing	
<b>Respiratory Protection</b>	In case of insufficient ventilation wear suitable respiratory equipment	

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<b>Appropriate Engineering Controls</b>	<b>Use adequate ventilation</b>	
<b>Exposure Limits</b>	<b>ACGIH</b> <b>TLV TWA: 10 mg/m<sup>3</sup> (total) TWA: 3 mg/m<sup>3</sup> (inhalable)</b> <b>OSHA</b> <b>PEL TWA: 15 mg/m<sup>3</sup> (total) TWA: 5 mg/m<sup>3</sup> (inhalable)</b>	

### 9- Physical and Chemical Properties


<b>Appearance</b>	<b>Fine Powder</b>
<b>Physical State</b>	<b>Solid</b>
<b>Color</b>	<b>White</b>
<b>Odor</b>	<b>Odorless</b>
<b>Solubility</b>	<b>Insoluble in cold water</b>
<b>Density</b>	<b>600 – 650 kg/m<sup>3</sup></b>
<b>Auto-ignition Temperature</b>	-
<b>Flash point</b>	-
<b>Melting Point</b>	-
<b>Boiling Point</b>	-
<b>Vapor pressure</b>	-
<b>Viscosity</b>	-
<b>Molecular Weight</b>	-
<b>PH</b>	<b>4-7</b>
<b>Other Information</b>	-

### 10- Stability and Reactivity

<b>Stability</b>	<b>The product is stable under storage at normal ambient temperatures.</b>
<b>Conditions to Avoid</b>	<b>Avoid generation of dust, confinement, oxygen source and source of ignition.</b>
<b>Incompatible Materials</b>	<b>Oxidizing agents, acids, iodine and fuels.</b>
<b>Possibility of Hazardous Reactions</b>	-
<b>Other Information</b>	-


### 11- Toxicological Information

<b>Possible exposure routes</b>	<b>Eyes</b>	-	
	<b>Skin</b>	-	
	<b>Inhalation</b>	-	
	<b>Ingestion</b>	-	
<b>Acute and Chronic Toxicity</b>	-		

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<b>Other Toxicity Information</b>	-
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## 12- Ecological Information

<b>Eco toxicity</b>	<b>Avoid uncontrolled release to the environment</b>	
<b>Persistence and degradability</b>	-	
<b>Bioaccumulation potential</b>	-	
<b>Mobility in soil</b>	-	
<b>Other adverse effects</b>	-	

## 13- Disposal Considerations

<b>Waste</b>	<b>Dispose of unused content, in accordance with national and local regulations.</b>
<b>Product Containers</b>	<b>Discard the unused container, in accordance with national and local regulations. Be sure to use duly authorized waste management companies, if applicable.</b>


## 14- Transport Information

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## 15- Regulatory information

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## 16- Other information

<b>ACGIH: Association Advancing Occupational and Environmental Health</b> <b>TLV: Threshold Limit Values</b> <b>OSHA: Occupational Safety and Health Administration</b> <b>PEL: Permissible Exposure Limits</b> <b>TWA: Time-Weighted Average. Average value of exposure over the course of an 8 hour work shift.</b> <b>NIOSH: National Institute for Occupational Safety and Health</b> <b>MSHA: Mine Safety and Health Administration</b>	
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