

## Tapioca Starch

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 /  
March 26, 2012 / Rules and Regulation

Revision Date: 24-Jun-2024  
Supersedes: 10-Sep-2021

### 1 PRODUCT & COMPANY IDENTIFICATION

<b>Product Name:</b>	Tapioca Starch	<b>Distributor:</b>	MakingCosmetics Inc.
<b>Synonyms:</b>	No data available	<b>Address:</b>	10800 231 <sup>st</sup> Way NE Redmond, WA 98053 (USA)
<b>INCI Name:</b>	Tapioca Starch, Water, Polymethylsilsesquioxane	<b>Phone / Fax:</b>	425-292-9502 / 425-292-9601
<b>CAS Number:</b>	9005-25-8, 7732-18-5, 68554-70-1	<b>Web:</b>	<a href="http://www.makingcosmetics.com">www.makingcosmetics.com</a>
<b>Formula:</b>	No data available	<b>Emergency Telephone Number:</b>	1-800-424-9300 (Chemtrec)
<b>Product Form:</b>	Solid		
<b>Product Use:</b>	Cosmetic use		

### 2 HAZARDS IDENTIFICATION

<b>GHS Classification:</b>	Combustible dust												
<b>GHS Signal Word:</b>	<b>WARNING</b>												
<b>GHS Hazard Pictograms:</b>	None.												
<b>GHS Hazard Statements:</b>	If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.												
<b>GHS Precautionary Statements:</b>	None.												
<b>Potential Health Hazards:</b>	Eyes: May be an irritant. Inhalation: May be an irritant. Skin: May be an irritant. Ingestion: Not expected to be an irritant.												
<b>NFPA Ratings (704):</b>	<table border="0"> <tr> <td>Health</td> <td>0</td> <td>Minimal</td> </tr> <tr> <td>Flammability</td> <td>1</td> <td>Slight</td> </tr> <tr> <td>Reactivity</td> <td>0</td> <td>Minimal</td> </tr> <tr> <td>Specific Hazard</td> <td>N/A</td> <td></td> </tr> </table>	Health	0	Minimal	Flammability	1	Slight	Reactivity	0	Minimal	Specific Hazard	N/A	
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<b>HMIS Ratings:</b>	<table border="0"> <tr> <td>Health</td> <td>0</td> <td>Minimal</td> </tr> <tr> <td>Flammability</td> <td>2</td> <td>Moderate</td> </tr> <tr> <td>Physical Hazards</td> <td>0</td> <td>Minimal</td> </tr> </table>	Health	0	Minimal	Flammability	2	Moderate	Physical Hazards	0	Minimal			
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Physical Hazards	0	Minimal											

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Tapioca Starch	9005-25-8	≥84%	Not Available
Water	7732-18-5	≤14%	Not Available
Polymethylsilsesquioxane	68554-70-1	≤2%	Not Available

### 4 FIRST AID MEASURES

<b>Eyes:</b>	Rinse with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. Seek medical attention if necessary.
<b>Inhalation:</b>	Remove to fresh air. Keep patient warm and at rest. Rinse nose and mouth with water. Seek medical attention if necessary.
<b>Skin:</b>	Remove contaminated clothing and shoes. Rinse with water. Seek medical attention if necessary.
<b>Ingestion:</b>	Clean mouth with water and drink afterwards plenty of water. Do Not Induce Vomiting. Never give anything by mouth to an unconscious person.
<b>Physician Notes:</b>	No hazards which require special first aid measures. No specific product related symptoms are known. Treat symptomatically.

## 5 FIRE-FIGHTING MEASURES

<b>Suitable (and unsuitable) extinguishing media:</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. No unsuitable extinguish media listed.
<b>Special protective equipment &amp; precautions for firefighters:</b>	Wear self-contained breathing apparatus and full protective clothing, including eye protection and boots. Treat as oil fire. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges. Follow standard procedure for chemical fires.
<b>Specific hazards arising from the chemical:</b>	Dust may form explosive mixture in air. See also Stability and reactivity section.

## 6 ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment &amp; emergency procedures:</b>	Avoid dust formation. Follow safe handling advice. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions:</b>	Avoid liquid release into sewers/public water/environment. Notify environmental authorities in case of leak.
<b>Methods and material for containment and cleaning up:</b>	Sweep up and shovel. Keep in suitable, closed containers for disposal. Dispose of absorbed material in accordance with the regulations.

## 7 HANDLING & STORAGE

<b>Precautions for safe handling:</b>	Avoid creating dust. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Provide appropriate exhaust ventilation at places where dust is formed. No sparking tools should be used. Use good personal hygiene practice. See section 8 for recommendations on the use of personal protective equipment.
<b>Conditions for safe storage, incl. any incompatibilities:</b>	Store in original container. Keep in a dry place. Store between 40-77 °F (5-25 °C). Keep container tightly closed. No decomposition if stored and applied as directed. Store away from incompatible materials (see section 10 for incompatibilities).

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Component</u>	<u>Exposure Limits</u>	<u>Basis</u>	<u>Entity</u>
Starch (9005-25-8)	10 mg/m <sup>3</sup>	PEL (total dust)	CAL PEL
	5 mg/m <sup>3</sup>	PEL (respirable dust fraction)	CAL PEL
	10 mg/m <sup>3</sup>	TWA	ACGIH
	5 mg/m <sup>3</sup>	TWA (respirable)	NIOSH REL
	10 mg/m <sup>3</sup>	TWA (total)	NIOSH REL
	15 mg/m <sup>3</sup>	TWA (total dust)	OSHA Z-1
	5 mg/m <sup>3</sup>	TWA (respirable fraction)	OSHA Z-1
	15 mg/m <sup>3</sup>	TWA (total dust)	OSHA P0
	5 mg/m <sup>3</sup>	TWA (respirable dust fraction)	OSHA P0
	Dust	10 mg/m <sup>3</sup>	PEL (total dust)
5 mg/m <sup>3</sup>		PEL (respirable dust fraction)	CAL PEL
Further Info:			
(n): The concentration and percentage of the particulate used for this limit are determined from the fraction passing a size selector with the following characteristics: Aerodynamic Diameter in Micrometers (unit density sphere). Percent Passing Selector 0			
..... 100 1 .....		..... 97 2	
..... 91 3 .....		..... 74 4	
..... 50 5 .....		..... 30 6	
..... 17 7 .....		..... 9 8	
..... 5 10 .....		..... 1	
15 mg/m <sup>3</sup>		TWA (total dust)	OSHA Z-3
Further Info:			
d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1.			
5 mg/m <sup>3</sup>	TWA (respirable fraction)	OSHA Z-3	
Further Info:			
d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1.			
50 Million particles per cubic	TWA (total dust)	OSHA Z-3	

**foot**

Further Info:

a: Based on impinger samples counted by light-field techniques. d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1. mppcf X 35.3 = million particles per cubic meter = particles per c.c  
**15 Million particles per cubic TWA (respirable fraction) OSHA Z-3**

**foot**

Further Info:

a: Based on impinger samples counted by light-field techniques. d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1. mppcf X 35.3 = million particles per cubic meter = particles per c.c

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

**Personal Protection:**

**Eyes:** Wear safety glasses.

**Inhalation:** No personal respiratory protective equipment normally required. In the case of dust, vapor, or aerosol formation, use respirator with an approved filter. Half mask with a particle filter P2 (EN 143).

**Body:** For prolonged or repeated contact use protective gloves and full protective clothing.

**Other:** Provide appropriate exhaust ventilation at places where dust is formed. Use good personal hygiene practices. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Powder	<b>Vapor Pressure:</b>	Not applicable
<b>Odor:</b>	Characteristic	<b>Vapor Density:</b>	Not applicable
<b>Odor Threshold:</b>	No data available	<b>Evaporation Rate:</b>	Not applicable
<b>Color:</b>	Off-white	<b>Solid/Gas Flammability:</b>	Not classified as flammable
<b>Molecular Weight:</b>	No data available	<b>Upper/lower Explosive Limit:</b>	No data available
<b>pH:</b>	5 - 7.5 (Concentration: 20%)	<b>Flash Point:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable	<b>Specific Gravity:</b>	No data available
<b>Melting/Freezing Point:</b>	No data available	<b>Water Solubility:</b>	Slightly soluble
<b>Relative Density:</b>	No data available	<b>Auto-Ignition Temperature:</b>	No data available
<b>Partition Coefficient: n-octanol/water:</b>	No data available	<b>Decomposition Temperature:</b>	No data available
<b>Viscosity:</b>	Not applicable	<b>Explosive Properties:</b>	Not explosive
<b>Oxidizing Properties:</b>	Not classified as oxidizing	<b>Combustibility:</b>	May form combustible dust in air.
<b>Dust Deflagration Index (Kst):</b>	140.4 m.b_/s	<b>Dust Explosion Class:</b>	St1

**10 STABILITY AND REACTIVITY**

<b>Reactivity:</b>	Stable under normal conditions.
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous Polymerization:</b>	No data available.
<b>Conditions to Avoid:</b>	None known.
<b>Incompatible Materials:</b>	None known.
<b>Hazardous Decomposition Products:</b>	No hazardous decomposition products are known.
<b>Possible Hazardous Reactions:</b>	Dust may form explosive mixture in air.

**11 TOXICOLOGICAL INFORMATION**

<b>Acute Toxicity:</b>	Not classified based on available information.
<b>Skin:</b>	Product dust may be irritating to skin.
<b>Eyes:</b>	Product dust may be irritating to eyes.
<b>Inhalation:</b>	Product dust may be irritating to respiratory system.
<b>Ingestion:</b>	Not expected to be irritating. (Rat) Acute Oral Toxicity; Component: Starch; LD50; > 5,000 mg/kg. Information taken from

	reference works and literature.
<b>Carcinogenicity:</b>	Not classified based on available information.
<b>IARC:</b>	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
<b>OSHA:</b>	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
<b>NTP:</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>Germ Cell Mutagenicity:</b>	Not classified based on available information.
<b>Specific Target Organ Toxicity:</b>	Not classified based on available information.
<b>Skin Corrosion/Irritation:</b>	Not classified based on available information.
<b>Serious Eye Damage/Irritation:</b>	Not classified based on available information.
<b>Respiratory/Skin Sensitization:</b>	Not classified based on available information.
<b>Reproductive Toxicity:</b>	Not classified based on available information.
<b>Aspiration Hazard:</b>	Not classified based on available information.
<b>Over Exposure Symptoms:</b>	The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

## 12 ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	No data available.
<b>Aquatic Vertebrate:</b>	No data available.
<b>Aquatic Invertebrate:</b>	(Daphnia magna) EC50: >100 mg/l; 48 hours.
<b>Terrestrial:</b>	(Pseudokirchneriella subcapitata) EC50: > 100 mg/l; 72 hours.
<b>Persistence and Degradability:</b>	Readily biodegradable. Method: OECD Test Guideline 301B.
<b>Bioaccumulative Potential:</b>	Bioaccumulation is unlikely.
<b>Mobility in Soil:</b>	No data available.
<b>PBT and vPvB Assessment:</b>	No data available.
<b>Other Adverse Effects:</b>	No data available.
<b>Hazards to the Ozone Layer:</b>	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances. Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

## 13 DISPOSAL CONSIDERATIONS

<b>Waste Residues:</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product.
<b>Product Containers:</b>	Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

## 14 TRANSPORT INFORMATION

<b>DOT (Dept. of Transportation, USA):</b>	Not regulated as a dangerous good.
<b>TDG (Transportation of Dangerous Goods, Canada):</b>	Not regulated as a dangerous good.
<b>IMDG (International Maritime Dangerous Goods):</b>	Not regulated as a dangerous good.
<b>IATA (International Air Transport Association):</b>	Not regulated as a dangerous good.
<b>ADR (Road Transportation):</b>	Not regulated as a dangerous good.
<b>49 CFR:</b>	Not regulated as a dangerous good.
<b>NOM-002-SCT</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</b>	Not applicable for product as supplied.

## 15 REGULATORY INFORMATION

<b>TSCA Inventory Status:</b>	Yes. On the inventory, or in compliance with the inventory. No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.
<b>CERCLA Reportable Quantity:</b>	This material does not contain any components with a CERCLA RQ.
<b>SARA 304:</b>	This material does not contain any components with a section 304 extremely hazardous substances reportable quantity.
<b>SARA 302:</b>	This material does not contain any components with a section 302 extremely hazardous substances threshold planning quantity.
<b>SARA 311/312 Hazards:</b>	Combustible dust.
<b>SARA 313:</b>	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
<b>Clean Air Act:</b>	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61). This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).
<b>Clean Water Act:</b>	This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3. This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307 This product does not contain any priority pollutants related to the U.S. Clean Water Act. This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.
<b>ME Chemicals of High Concern:</b>	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
<b>California Proposition 65:</b>	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
<b>Canada (DSL):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>China (IECSC):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>Australia (AIIIC):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>Japan (ENCS):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>Japan (ISHL):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>Philippines (PICCS):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>Taiwan (TCSI):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>Korea (KECI):</b>	Yes. On the inventory, or in compliance with the inventory.
<b>New Zealand (NZIoC):</b>	Yes. On the inventory, or in compliance with the inventory.

## 16 OTHER INFORMATION

<b>Additional Abbreviations:</b>	ACGIH: USA. ACGIH Threshold Limit Values (TLV) CAL PEL: California permissible exposure limits for chemical contaminants (Title 8, Article 107) NIOSH REL/TWA: USA. Time-weighted average concentration for up to a 10-hour workday during 40hr workweek. OSHA P0: USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 OSHA Z-1: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants OSHA Z-3: USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts LD50: Lethal Dose to 50% of a test population ECx: Concentration associated with x% response.
<b>Revision Date:</b>	24-Jun-2024
<b>Compliance:</b>	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
<b>Disclaimer:</b>	This 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 other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.