

# Safety Data Sheet

## Isoamyl Benzoate for Synthesis



SDS Revision Date:

12/09/2014

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

<b>Product Identity</b>	Isoamyl Benzoate for Synthesis
<b>Alternate Names</b>	Isoamyl Benzoate for Synthesis

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

<b>Intended use</b>	Chemical for synthesis
<b>Application Method</b>	See Technical Data Sheet.

#### 1.3. Details of the supplier of the safety data sheet

<b>Company Name</b>	Thermco Products, Inc. 10 Millpond Drive, Unit #10 Lafayette, NJ 07848
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#### Emergency

<b>Customer Service: Thermco Products, Inc.</b>	973.300.9100
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### 2. Hazard identification of the product

#### 2.1. Classification of the substance or mixture

Combustible Liquid;H227    Combustible Liquid.

#### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.  
H227 Combustible liquid.

#### **[Prevention]:**

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.  
P280 Wear protective gloves / eye protection / face protection.

#### **[Response]:**

No GHS response statements

#### **[Storage]:**

P403+235 Store in a well ventilated place. Keep cool.

#### **[Disposal]:**

P501 Dispose of contents / container in accordance with local / national regulations.

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### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
ISOPENTYL BENZOATE CAS Number: 0000094-46-2	100	Not classified	[1]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### 4. First aid measures

#### 4.1. Description of first aid measures

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
<b>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed

<b>Overview</b>	No specific symptom data available. See section 2 for further details.
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### 5. Fire-fighting measures

#### 5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Do not use; water jet.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale vapors/aerosols. Ensure supply of fresh air in enclosed rooms.

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Hazardous decomposition: No hazardous decomposition data available.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

### 5.3. Advice for fire-fighters

#### Special risks:

Combustible. Vapors heavier than air.

Forms explosive mixtures with air on intense heating.

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

#### Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus.

Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. ----

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Do not inhale vapors/aerosols. Ensure supply of fresh air in enclosed rooms.

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

Do not inhale vapors/aerosols. Ensure supply of fresh air in enclosed rooms.

Take up with liquid-absorbent material (e.g. Chemizorb). Forward for disposal. Clean up affected area.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Store in accordance with the National Fire Protection Association's publication NFPA 30, Flammable and Combustible Liquids Code. 29 CFR 1910.106 applies to the handling, storage, and use of flammable and combustible liquids.

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store in a cool dry area, away from heat, sparks and open flame. Keep containers sealed when not in use. Store out of direct sunlight.

Incompatible materials: Strong oxidizing agents

Tightly closed. At +15C to +25C.

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See section 2 for further details. - [Storage]:

### 7.3. Specific end use(s)

No data available.

## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0000094-46-2	ISOPENTYL BENZOATE	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000094-46-2	ISOPENTYL BENZOATE	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

### 8.2. Exposure controls

#### Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

#### Eyes

Protective safety glasses required

#### Skin

Butyl rubber gloves  
Layer thickness: 0.7 mm  
Breakthrough time: >240 min

#### Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

#### Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

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**9. Physical and chemical properties**

<b>Appearance</b>	Colorless Liquid
<b>Odor</b>	Almost Odorless
<b>Odor threshold</b>	Not Measured
<b>pH</b>	NA
<b>Melting point / freezing point</b>	NA
<b>Initial boiling point and boiling range</b>	260 C
<b>Flash Point</b>	89 C
<b>Evaporation rate (Ether = 1)</b>	NA
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> NA <b>Upper Explosive Limit:</b> NA
<b>Vapor pressure (Pa)</b>	NA
<b>Vapor Density</b>	NA
<b>Density</b>	0.99 g/cm <sup>3</sup> (@20C)
<b>Solubility in Water</b>	Insoluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	NA
<b>Decomposition temperature</b>	NA
<b>Viscosity (cSt)</b>	NA
<b>VOC %</b>	NA
<b>Log Pow</b>	4.15 (experimental) (Lit.)

**9.2. Other information**

No other relevant information.

**10. Stability and reactivity**

**10.1. Reactivity**

Hazardous Polymerization will not occur.

**10.2. Chemical stability**

Stable under normal circumstances.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Forms explosive mixtures with air on intense heating.

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**10.5. Incompatible materials**

Strong Oxidizing agents.

**10.6. Hazardous decomposition products**

No hazardous decomposition data available.

### 11. Toxicological information

**Acute toxicity**

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
ISOPENTYL BENZOATE - (94-46-2)	6330.00, Rat - Category: NA	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

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### 12. Ecological information

#### 12.1. Toxicity

Do not allow product to enter water, wastewater or soil! See Section 3 for chemical specific data.

#### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
ISOPENTYL BENZOATE - (94-46-2)	Not Available	Not Available	Not Available

#### 12.2. Persistence and degradability

There is no data available on the preparation itself.

#### 12.3. Bioaccumulative potential

An appreciable bioaccumulation potential is to be expected ( $\log P_{o/w} > 3$ )

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

#### 12.6. Other adverse effects

No data available.

### 13. Disposal considerations

#### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

### 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable DOT Label: ---	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

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### 14.5. Environmental hazards

**IMDG** Marine Pollutant: No

### 14.6. Special precautions for user

No further information

## 15. Regulatory information

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance Control Act ( TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**WHMIS Classification** B3

### US EPA Tier II Hazards

**Fire:** Yes

**Sudden Release of Pressure:** No

**Reactive:** No

**Immediate (Acute):** No

**Delayed (Chronic):** No

**EPCRA 311/312 Chemicals and RQs:**  
(No Product Ingredients Listed)

**EPCRA 302 Extremely Hazardous :**  
(No Product Ingredients Listed)

**EPCRA 313 Toxic Chemicals:**  
(No Product Ingredients Listed)

**Proposition 65 - Carcinogens (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Developmental Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Female Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Male Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)

**N.J. RTK Substances (>1%) :**  
(No Product Ingredients Listed)

**Penn RTK Substances (>1%) :**  
(No Product Ingredients Listed)



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**16. Other information**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is: not applicable

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

Disclaimer: This information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

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## SAFETY DATA SHEET – JANUARY 3, 2018



### Section 1 – Identification

Product Identifier:	Silica Sand
Trade Names:	Holliston Sand Products, Slater Farms Products
Product Uses:	Filtration Media, Foundry Sand, Industrial Fillers, Bio-retention and Agricultural Sand, Sports Turf, Recreational Products, Commercial Products, Traction Sand Not recommended for sand-blasting.
Manufacturer's Name:	Holliston Sand Company, Inc.
Manufacturer's Address	PO Box 1168, Slatersville, RI 02876
Manufacturer's Telephone	401.766.5010, Monday – Friday, 7:00am to 5:00pm
Manufacturer's Facsimile:	401.762.4976
Emergency Telephone	401.766.5010, Monday – Friday, 7:00am to 5:00pm

### Section 2 – Hazards Identification

#### GHS – US Classification and Label Elements:

##### Health:

Category 1A – Carcinogen		
Category 1 - Specific Target Organ Toxicity (STOT) following repeated exposures		
Category 2B - Eye Irritation		
Signal Word (GHS-US) - DANGER		
GHS-US Labeling / Hazard Pictograms	 GHS08	 GHS07

#### Hazard Statements (GHS-US)

H335	May cause eye and respiratory irritation
H350	May cause cancer by inhalation
H372	Causes damage to organs through prolonged or repeated exposure by inhalation.

### Precautionary Statements (GHS-US)

P202 – SDS - Read all safety precautions prior to handling.	P264 – Wash thoroughly after handling.
P308 / P313/P314/P304 – Call for medical attention if not well or uncomfortable. If inhaled, provide fresh air.	
P260 / P280 – Never breathe dust. Wear PPE prior to use.	P271 – Use in a well ventilated area.
P403 – Store properly. Closed container.	P501 – Dispose of according to local / regional regulations.

### Section 3 – Composition

Name	Product Identifier	Percentage (%)	GHS-US Classification
Quartz	CAS #: 14808-60-7	85 – 99.9	Carc. 1A, H350, STOT SE 3, H335, STOT RE 1, H372

### Section 4 – First Aid Measures

ANY SERIOUS INJURY OR UNCONSCIOUSNESS OBSERVATION SHOULD BE AN AUTOMATIC EMERGENCY CALL TO 911.

**Inhalation** – Move person to a clear area, provide fresh air. Provide medical or emergency attention.

**Eye** – Flush eye / eyes with water as needed. Provide medical attention as necessary.

**Skin** – Simple abrasions should be cleansed with mild soap and water. Provide medical attention as necessary.

**Ingestion** – Discomfort should be followed up with medical attention.

**Signs and Symptoms of Exposure** - Symptoms of silicosis may first appear 15 to 20 years after someone's exposure to crystalline silica. As the disease progresses, symptoms may include:

<i>Shortness of breath</i>	<i>Severe Cough</i>	<i>Weakness</i>
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If you have silica in your lungs, your body may not be able to fight infections well. This can lead to other illnesses that can cause.

<i>Chest Pains</i>	<i>Weight Loss</i>	<i>Night Sweats</i>
<i>Respiratory Failure</i>	<i>Fever</i>	

As the disease progresses over time, these symptoms can become worse. The symptoms of acute silicosis which can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as six months, are the same as those associated with chronic silicosis. The symptoms of scleroderma, an autoimmune disease, include thickening and stiffness of the skin, particularly in the fingers, shortness of breath, difficulty swallowing and joint problems.

### Section 5 – Fire Fighting Measures

Extinguishing Media:	Compatible with all media. Use appropriate media for surrounding fire.
Unusual Fire and Explosion Habits:	None known.
Special Fire Fighting Procedure:	None known. Not flammable. Use normal fire fighting equipment.
Hazardous Combustion Products:	None known.



## Section 6 – Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures
  - General measures.
    - Do not breathe dust. Avoid generation of dust during clean-up of spills. Recover the product by vacuuming, shoveling or sweeping. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Use water to wet down clean up area to minimize particulate.
  - For non-emergency / emergency personnel.
    - Wear suitable protective clothing, gloves, eye and face protection. Use recommended respiratory protection. Collect as any solid.
- Environmental Precautions – no additional information available
- Methods and Material for Containment and Clean-up
  - Avoid generation of dust during clean-up of spills. Recover the product by vacuuming, shoveling or sweeping. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Use water to wet down clean up area to minimize particulate.

## Section 7 – Handling and Storage

- This product is not to be used for abrasive blasting without proper equipment and training. Do not breathe dust, which may be created during handling of this product.
- Engineering measures and good housekeeping are essential to preventing accumulation of silica dust in the workplace. Use adequate ventilation and dust collection systems.
- Testing can ensure engineering measures are sufficient. PPE is a solution until verification is established. Refer to Section 8 – Exposure Controls / Personal Protection for further information.
- Silica dust is not always visible in a form of a cloud. Use PPE.
- In accordance with OSHA's Hazard Communication Standard (29CFR 1910.12, 1915.99, 1917.28, 1918.90, 1926.59, 1928.21), state, and / or local right to know laws and regulations, familiarize your employees with this SDS and the information contained herein.
- Warn your employees, your customers and other third parties (in case of resale or distribution to others) of the potential health risks associated with the use of this product and train them in the appropriate use of PPE and engineering controls, which will reduce their risks of exposure.
- See ASTM International standard practice E1132-06, "Standard Practice for Health Requirements Relating to Occupational Exposure to Respirable Crystalline Silica."
- Store in a dry, cool place. Keep container tightly closed.

## Section 8: Exposure Controls / Personal Protection

### Control Parameters

Quartz (14808-60-7) – Occupational exposure limits (respirable fraction) in air for dust containing crystalline silica.		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> ) (8 hour weighted average)	0.025 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> ) (10 hour weighted average)	0.05 mg/m <sup>3</sup>
USA MSHA/OSHA	MSHA/OSHA PEL (TWA) (mg/m <sup>3</sup> ) (8 hour weighted average) (Mineral Dust)	(30)/(%SiO <sub>2</sub> +2) mg/m <sup>3</sup> – total dust (10)/(% SiO <sub>2</sub> +2) mg/m <sup>3</sup> – respirable fraction

Occupational exposure limits in air for inert / nuisance dust.			
USA ACGIH	ACGIH TLV	3 mg/m <sup>3</sup>	10mg/m <sup>3</sup>
USA MSHA/OSHA	MSHA/OSHA PEL (As Inert or Nuisance Dust)	5 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

### Exposure Controls

Engineering controls	Ensure adequate ventilation, especially in confined areas. Avoid dust production.
Personal protection equipment (PPE)	Use dust suits, protective goggles and respiratory protection in dusty areas. Self contained breathing apparatus is also a good option during dust production. Get training on the use of all PPE equipment. Respirator fit testing is mandatory. Contact NIOSH at 800.35.NIOSH, WWW.CDC.GOV/NIOSH
	Use impermeable gloves for hand protection.
	Use protective goggles for eye protection
	Use NIOSH approved respirators in areas containing airborne dust.
Hygiene	Always wash your hands after handling
Do not breathe dust. Use PPE. Research and engineer a solution for each application.	

California Inhalation Reference Exposure Limit (REL) as of 12/08: Crystalline silica (quartz, cristobalite, tridymite) is 3 ug/m <sup>3</sup> .
Canadian OEL:
<ul style="list-style-type: none"> <li>• Canada Labour Code: 0.025 mg/m<sup>3</sup> (respirable)</li> <li>• Alberta, British Columbia: 0.025 mg/m<sup>3</sup> (respirable quartz and cristobalite)</li> <li>• Saskatchewan: 2 mg/m<sup>3</sup> (respirable, amorphous: silica fume); 0.1 mg/m<sup>3</sup> (respirable, amorphous: silica fused); 0.05 mg/m<sup>3</sup> (respirable, cristobalite); 0.05 mg/m<sup>3</sup> (respirable tridymite); 0.1 mg/m<sup>3</sup> (respirable, quartz); 0.1 mg/m<sup>3</sup> (respirable, tripoli)</li> <li>• Manitoba, Newfoundland, Prince Edward Island: 0.025 mg/m<sup>3</sup> (respirable)</li> <li>• Ontario: 0.05 mg/m<sup>3</sup> (respirable cristobalite, tridymite); 0.1 mg/m<sup>3</sup> (quartz, tripoli); 0.1 mg/m<sup>3</sup> (silica fused); 2 mg/m<sup>3</sup> (silica fume)</li> <li>• Quebec: 0.05 mg/m<sup>3</sup> (respirable, cristobalite, tridymite); 0.1 mg/m<sup>3</sup> (quartz, tripoli)</li> <li>• New Brunswick: 0.1 mg/m<sup>3</sup> (quartz); 0.05 mg/m<sup>3</sup> (cristobalite)</li> <li>• Nova Scotia: 0.025 mg/m<sup>3</sup> (quartz, cristobalite)</li> <li>• Yukon: 2 mg/m<sup>3</sup> (respirable, amorphous); 300 particles/ml measured with a konimeter (quartz, and tripoli); 150 particles/ML measured with a konimeter (cristobalite and tridymite)</li> <li>• Northwest Territories, Nunavut: 2 mg/m<sup>3</sup> (respirable, amorphous); 0.05 mg/m<sup>3</sup> (respirable, cristobalite, tridymite, silica flour); 0.1 mg/m<sup>3</sup> (respirable, fused silica, quartz, tripoli)</li> </ul>
Austria OEL - Maximum concentration 0.15 mg/m <sup>3</sup>
Japan OEL - Japan Society of Occupational Health Respirable crystalline silica 0.03 mg/m <sup>3</sup>
Poland OEL TWA -2 mg/m <sup>3</sup> (total inhalable dust, containing >50% free crystalline silica);
<ul style="list-style-type: none"> <li>• 0.3 mg/m<sup>3</sup> (respirable dust, containing &gt;50% free crystalline silica);</li> <li>• 4.0 mg/m<sup>3</sup> (total inhalable dust, containing 2% to 50% free crystalline silica);</li> <li>• 1.0 mg/m<sup>3</sup> (respirable dust, containing 2% to 50% free crystalline silica)</li> </ul>
United Kingdom OEL – 0.1 mg/m <sup>3</sup>
Mexico – 0.1 mg/m <sup>3</sup> (quartz, inhalable)
<ul style="list-style-type: none"> <li>• 0.05 mg/m<sup>3</sup> (cristobalite, inhalable)</li> <li>• 0.05 mg/m<sup>3</sup> (tridymite, inhalable)</li> <li>• 0.1 mg/m<sup>3</sup> (tripoli containing respirable quartz powder, inhalable)</li> <li>• (Also refer to ACGIH)</li> </ul>
Argentina – 0.05 mg/m <sup>3</sup> (quartz, respirable)
<ul style="list-style-type: none"> <li>• 0.05 mg/m<sup>3</sup> (cristobalite, respirable)</li> <li>• 0.05 mg/m<sup>3</sup> (tridymite, respirable)</li> <li>• 0.1 mg/m<sup>3</sup> (tripoli, respirable)</li> </ul>

## Section 9: Physical and chemical properties

Physical State / Appearance	Solid / Crystalline
Odor	None
Odor Threshold	No data available
Color	Natural
pH	No data available
Evaporation rate	No data available
Melting point	1710°C (3110°F)
Freezing point	No data available
Boiling point	2230°C (4046°F)
Flash point	No data available
Self ignition temperature	No data available

Decomposition temperature	No data available
Flammability (solid, gas)	Non-combustible solid
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	2.65 (approx.)
Solubility	Practically insoluble.
Log Pow	No data available
Log Kow	No data available
Viscosity	No data available
Explosive Limits	None known.
Oxidizing properties	None known.
Explosive limits	No data available

### Section 10: Stability and Reactivity

<b>Reactivity</b>	None under normal conditions. Reactive with strong oxidizing agents.
<b>Chemical / Thermal Stability</b>	Chemically stable under normal temperature and pressure. Thermal instability occurs under high temperatures above 870°C (1598°F). It can change to crystalline silica such as tridymite and cristobalite.
<b>Incompatible Materials</b>	Avoid strong oxidizers such as fluorine, chlorine tri-fluoride, hydrogen fluoride, oxygen di-fluoride, hydrogen peroxide, acetylene, ammonia.
<b>Hazardous Decomposition</b>	Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetra-fluoride.
<b>Hazardous Polymerization</b>	Not known to polymerize.

### Section 11: Toxicological Information

Acute toxicity	Not classified	
Aspiration hazard	Not classified	
Skin Irritation	Not classified	
Eye Irritation	Not classified	
Respiratory or skin sensitization	Not classified	
Reproductive toxicity	Not classified	
Specific target organ toxicity (single exposure)	Not classified	
Specific target organ toxicity (repeated exposure)	Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (inhalation)	
Germ cell mutagenicity	Not classified	
Carcinogenicity	May cause cancer - inhalation	
<b>Quartz (14808-60-7)</b>	<b>IARC Group – Group 1</b>	<b>National Toxicity Program (NTP) Status: Known Human Carcinogen</b>
<b>Silica – All grades (14808-60-7)</b>	Repeated or prolonged exposure to respirable crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal.	



**Section 12: Ecological Information**

Crystalline silica is not known to be eco-toxic, not readily biodegradable and not expected to bio-accumulate.

**Section 13: Disposal Considerations**

AS SOLD, our crystalline silica (quartz) products are not considered hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR 261 et seq. Dispose according to applicable local, state and federal regulations.

**Section 14: Transport Information**

Crystalline silica (quartz) is not a hazardous material for purposes of transportation under the U. S. Department of Transportation Table of Hazardous Materials, 49 CFR §172.101, and Transportation of Dangerous Goods Regulations in the European Union, Canada, Argentina, Republic of Uzbekistan and Japan. Consult applicable international, national, state, provincial or local laws. In accordance with DOT / TDG / ADR / RID / ADNOR / IMDG / ACO / IATA, crystalline silica is not a dangerous product in the sense of transport regulations.

**Section 15: Regulatory Information**

US Federal Regulations	Silica / Quartz 14808-60-7	Immediate health hazard - acute Delayed health hazard – chronic.	On US TSCA (Toxic Substances Control Act) inventory listing.
Canada Regulations		WHMIS Classification. Class D Division 2 Subdivision A – Very toxic material causing other toxic effects.	
International Info		IARC (international Agency for Research on Cancer) listing.	NTP (National Toxicology Program) specifies as a carcinogen.
U State Regulations		See below.	
U.S. - California - Proposition 65 - Carcinogens List . This product contains Quartz, a substance known to the state of California to cause cancer. U.S. - Hawaii - Occupational Exposure Limits - TWAs U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs) U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts U.S. - Illinois - Toxic Air Contaminant Carcinogens U.S. - Maine - Chemicals of High Concern U.S. - Massachusetts - Right To Know List U.S. - Michigan - Occupational Exposure Limits - TWAs U.S. - Minnesota - Chemicals of High Concern U.S. - Minnesota - Hazardous Substance List U.S. - Minnesota - Permissible Exposure Limits - TWAs U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New Jersey - Special Health Hazards Substances List U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Tennessee - Occupational Exposure Limits - TWAs U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term U.S. - Vermont - Permissible Exposure Limits - TWAs U.S. - Washington - Permissible Exposure Limits - STELs U.S. - Washington - Permissible Exposure Limits - TWAs			





**Section 16 – Other Information**

**NFPA**

Health Hazard	2 – intense or continued exposure could cause temporary or incapacitation or possible residual injury unless prompt medical attention is given	
Fire Hazard	0 – materials that will not burn	
Reactivity	0 – normally stable, even under fire exposure conditions, are not reactive with water	

**HMIS III Rating**

Health	2 - moderate hazard, temporary injury may occur
Flammability	0 – minimal hazard
Physical	0 – minimal hazard
Personal Protection	All equipment required plus engineering measures.

**Definitions**

Carc. 1A	Carcinogenicity Category 1A
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3

**User's Responsibility:** The OSHA Hazard Communication Standard 29 CFR 1910.1200 requires that this SDS be made available to your employees who handle or may be exposed to this product. Educate and train your employees regarding applicable precautions. Instruct your employees to handle this product properly.

**Disclaimer:** The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for one's own particular use. Since the actual use of the product described herein is beyond our control, Holliston Sand company, Inc., assumes no liability arising out of the use of the product by others. Appropriate warnings and safe handling procedures should be provided to handlers and users.

More information on the effects of crystalline silica exposure may be obtained from OSHA website: <http://www.osha.gov> or from NIOSH website: <http://www.cdc.gov/niosh>.



## Section 1 Chemical Product and Company Identification

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**Aldon  
Corporation**

221 Rochester Street  
Avon, NY 14414  
(585) 226-6177

**CHEMTREC 24 Hour Emergency USA**  
**Phone Number (800) 424-9300**  
**1 703-741-5500 (from anywhere in the world).**  
For laboratory and industrial use only.  
Not for drug, food or household use.

**Product** FOOD COLORING - SET OF 4

**Synonyms** Vegetable Dye

## Section 2 Hazards Identification

**This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.**

**Signal word:** None required

**Pictograms:** No symbol required

**Target organs:** None known

**GHS Classification:** None required

**GHS Label information: Hazard statement:** None required

**Precautionary statement:** None required

**Supplemental information:**

Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
(Parts 1-4) Water	7732-18-5	99.5%	231-791-2
(Part 1) FD&C Blue #1 (C.I. No. 42090)	3844-45-9	0.5%	223-339-8
(Part 2) FD&C Yellow #5 (C.I. No. 19140)	1934-21-0	0.5%	217-699-5
(Part 3) FD&C Red #40 (C.I. No. 16035)	25956-17-6	0.5%	247-368-0
(Part 4) FD&C Green #3 (C.I. No. 42053)	2353-45-9	0.5%	219-091-5

## Section 4 First Aid Measures

**INGESTION:** MAY BE HARMFUL BY INGESTION. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE ALLERGIC REACTIONS. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area away from incompatible substances.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	None established	None established	None established	None established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Liquid, dark yellow, green, blue or red.	<b>Evaporation rate ( Water = 1):</b> <1	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> No odor.	<b>Flammability (solid/gas):</b> Data not available.	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available.	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> Data not available.
<b>pH:</b> Data not available.	<b>Vapor pressure (mm Hg):</b> 14 (water)	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> Approximately 0°C (32°F) (water)	<b>Vapor density (Air = 1):</b> 0.7 (water)	<b>Molecular formula:</b> Mixture
<b>Boiling point:</b> Approximately 100°C (212°F) (water)	<b>Relative density (Specific gravity):</b> Approximately 1.0 (water)	<b>Molecular weight:</b> Mixture
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> Complete in water.	

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures which cause evaporation.

**Incompatible materials:** Strong oxidizers, reducing agents.

**Hazardous decomposition products:** Oxides of carbon, nitrogen oxides, sulfur oxides.

## Section 11 Toxicological Information

**Acute toxicity:** Data not available

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: 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.

IARC classified: Group 3: Not classifiable as to its carcinogenicity to humans.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Not expected to be a health hazard.

Ingestion: May be harmful by ingestion.

Skin: Contact may cause irritation or allergic reaction.

Eyes: Contact may cause irritation.

**Signs and symptoms of exposure:** To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.

**Additional information: RTECS #:** Data not available

## Section 12 Ecological Information

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable **2016 ERG Guide #:** Not applicable

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
All components listed with the following agencies: TSCA, EINECS, and DSL						This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

## Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.