

# MATERIAL SAFETY DATA SHEET

## Quartz *ColorGranules*<sup>TM</sup>

### I. PRODUCT AND MANUFACTURER IDENTIFICATION

**Product Name** Quartz *ColorGranules*<sup>TM</sup>  
**Manufacturer** Torginol, Inc.  
**Address** 4617 South Taylor Drive  
Sheboygan, WI 53081  
U.S.A.  
**Information Phone** (920) 694-4800 / 1-800-558-7596  
**Facsimile** (920) 694-4801  
**Website** www.torginol.com

HAZARD RATING	
0 = Least	Health - 3
1 = Slight	Flammability - 0
2 = Moderate	Reactivity - 0
3 = High	Personal Protection - E
4 = Extreme	

**Date Revised** January, 2012

### II. PRODUCT COMPONENTS

<u>Components</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Concentration (%)</u>
Crystalline Silica (Quartz) <sup>1</sup>	14808-60-7	<u>10mg/m<sup>3</sup></u>	0.05 mg/m <sup>3</sup>	95 - 97%
Proprietary Resin(s)*	N/E			< 1%
Titanium Dioxide Pigment*	13463-67-7	15mg/m <sup>3</sup>	10mg/m <sup>3</sup>	< 1%
Iron Oxide Pigment(s)*	1309-37-1	15mg/m <sup>3</sup>	10mg/m <sup>3</sup>	< 1%
Pigment(s)*	N/A			< 1%

<sup>1</sup> Crystalline Silica can be a lung injury and cancer hazard. Do not breathe dust. May cause delayed lung injury. Long term exposure can cause silicosis, a respiratory disease which can result in delayed, disabling, and sometimes fatal lung injury. Crystalline Silica inhaled from occupational sources can cause cancer in humans. Risk of injury is dependent on the duration and level of exposure. A single exposure will not result in serious and adverse effects.

\*No toxic chemical(s) subject to the reporting requirements of SARA Section 313 of Title III and of CFR 372 are present. Toxic Substance Control Act (TSCA) Status - O.K. on all above components.

### III. PHYSICAL / CHEMICAL CHARACTERISTICS

<b>Boiling Point</b>	4046°F	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	2.65
<b>Vapor Pressure (mm Hg)</b>	N/A	<b>Melting Point</b>	2930°F
<b>Vapor Density (AIR = 1)</b>	N/A	<b>Evaporation Rate (Butyl Acetate = 1)</b>	N/A
<b>Solubility in Water</b>	Insoluble		
<b>Appearance and Odor</b>	Various colored granules. No odor.		

### IV. FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Closed Cup Method)</b>	N/A		
<b>Flammable Limits</b>	<b>LEL</b>	<b>UEL</b>	
	N/A	N/A	
<b>Extinguishing Media</b>	N/A		
<b>Special Firefighting Procedures</b>	N/A		
<b>Unusual Fire and Explosion Hazards</b>	None		

### V. REACTIVITY DATA

<b>Stability</b>	Stable
<b>Incompatibility (Materials to Avoid)</b>	Hydrofluoric Acid and powerful oxidizing agents
<b>Hazardous Decomposition or Byproducts</b>	None Known
<b>Hazardous Polymerization</b>	Will not occur
<b>Conditions to Avoid</b>	None Known

### VI. HEALTH HAZARD DATA

<b>Routes of Entry:</b>	<b>Inhalation</b>	<b>Skin</b>	<b>Ingestion</b>
	Yes	No	No

**Signs and Symptoms of Exposure**  
Shortness of breath and reduced pulmonary function

## VI. HEALTH HAZARD DATA (CONTINUED)

<b>Routes of Entry:</b>	<b>Inhalation</b>	<b>Skin</b>	<b>Ingestion</b>
	Yes	No	No

### Signs and Symptoms of Exposure

Shortness of breath and reduced pulmonary function

### Health Hazards (Acute and Chronic)

*Acute Effects:* Irritation of skin and dermatitis

*Chronic Effects:* Excessive inhalation of dust may result in respiratory disease such as silicosis, pulmonary fibrosis, etc.

The IARC has evaluated in vol. 42 (monographs) that there is "sufficient evidence for the carcinogenicity of crystalline silica dust to experimental animals" and "limited evidence" with respect to humans.

<b>Carcinogenicity:</b>	<b>NPT?</b>	<b>IARC Monographs?</b>	<b>OSHA Regulated?</b>
	Yes (Respirable Silica)	Yes* Level 2A Grouping	No

### Medical Conditions Generally Aggravated by Exposure

Lung disorders and persons subject to eye irritation.

### Emergency and First Aid Procedures

**EYES** - Flush with water, holding lids open for 15 minutes or more. Call physician for advice if necessary.

**SKIN** - PROMPTLY wash with soap and water. DO NOT wash with solvents. Seek medical attention if irritation develops or persists.

**INHALATION** - Move person to fresh area if effects occur. If needed, give oxygen or artificial respiration to improve breathing. Consult physician.

**INGESTION** - Expected to be slightly toxic by ingestion. If swallowed, induce vomiting immediately as directed by a physician. Get medical attention immediately. Never give liquids to an unconscious or convulsing person.

**OTHER HEALTH EFFECTS** - Medical conditions which may be aggravated by exposure to the product include conjunctivitis of the eye, dermatitis of the skin, asthma and respiratory diseases. Sensitization may occur by skin contact.

**NOTE:** Persons with lung disorders or who are sensitized should not use this product.

## VII. CONTROL MEASURES

### Respiratory Protection (Specify Type)

"Provide adequate exhaust ventilation; use a NIOSH - approved respirator if PELS/TLVS are exceeded"

#### Ventilation

Local Exhaust - to meet PEL requirements

Mechanical - Adequate to meet PEL requirements

Special - None Known

**Protective Gloves** - Recommended

**Eye Protection** - Recommended

#### Other Precautions

Use adequate ventilation and dust collection. To minimize exposure, wear a respirator approved for silica dust when using, handling, storing or disposing of this product. Refer to the most recent standards of ANSI

(Z88.2), OSHA (29 CFR 1910.134) MSHA (30 CFR Parts 56 and 57), and NIOSH Respirator Decision Logic.

Maintain, clean and fit test respirators in accordance with OSHA Regulations

## VIII. PRECAUTIONS FOR SAFE HANDLING AND USE

### Steps to be Taken in Case Material is Released or Spilled

Do not breathe dust. Do not rely on your sight to determine if dust is in the air. Silica may be in the air without a visible dust cloud. Avoid creation of respirable dust.

### Waste Disposal Method

Dispose waste material in a sanitary land fill or as regulated by local, state and federal regulations.

### Precautions to be Taken in Handling and Storing

Avoid creation of respirable dust. Take precaution against bag breakage.

## IX. DISCLAIMER

### Disclaimer

The information contained herein is based on the data available to us and is believed to be correct.

Torginol, Inc. makes no warranty expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Torginol, Inc. assumes no responsibility for injury, loss or damage from the use of the product described.