

# Material Safety Data Sheet

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Res-Tek Inc.  
110 Riverside Drive  
Cartersville, Georgia 30120  
Non-Emergency Product Information: 1-888 / 737.8351  
Emergency Only (Chemtrec): 1-800 / 424-9300

## 1. PRODUCT INFORMATION

Trade Names / Synonyms: **Res-Tek<sup>®</sup> RT-05 Powder**  
Chemical Name: Silicon Dioxide  
Chemical Family: Silica Crystalline Quartz  
Chemical formula: SiO<sub>2</sub> **Product Use:** Industrial Flooring Filler

## 2. COMPOSITION, INFORMATION ON INGREDIENTS

Substance Description	Weight Percent	CAS#	Exposure Guidelines	
			OSHA (TWA)	ACGIH (TWA)
Quartz Sand and Flour	90-100	14808-60-7	0.1 mg/M <sup>3</sup> resp. dust 3.0 mg/M <sup>3</sup> total dust	0.1 mg/M <sup>3</sup> resp. dust 3.0 mg/M <sup>3</sup> total dust
Wetting Agent	0.1-1.0	Proprietary		

## 3. HAZARDS IDENTIFICATION

Dust causes eye, nose, and throat irritation. Prolonged inhalation of dust may lead to permanent lung injury (Silicosis). Symptoms include difficulty breathing, chest pains and cough. Symptoms may not develop until years after exposure.

See Section 11 for additional information on health hazards.

## 4. FIRST AID PROCEDURES

**EYE CONTACT:** Dust causes eye irritation. In case of contact, flush eyes with plenty of water. Hold eyelids apart during flushing to insure rinsing of the entire surface of the eye with water. Call a physician if irritation persists.

**SKIN CONTACT:** May cause drying of the skin. In case of contact, wash skin with soap and water. If irritation persists, call a physician.

**SKIN ABSORPTION:** Not expected to be absorbed through the skin.

**INHALATION:** Remove to fresh air. If not breathing, give CPR. If breathing is difficult, give oxygen. Get immediate medical attention. Excessive or prolonged exposure may cause permanent lung injury.

**INGESTION:** Not expected to be acutely toxic by ingestion.

## **CHRONIC EFFECTS OF OVEREXPOSURE:**

Long term exposure to excessive concentrations of dust from products containing crystalline silica may cause delayed (chronic) lung damage (silicosis). Acute or rapidly developing silicosis may occur in a short period of time in heavy exposure in certain occupations. Silicosis is a form of disabling pulmonary fibrosis that can be progressive and may lead to death.

The National Toxicology Program (NTP) publishes its Sixth Annual Report on Carcinogens which concludes that "silica crystalline (respirable)" may reasonable be anticipated to be a carcinogen. The NTP conclusion is based on sufficient evidence for carcinogenicity of respirable crystalline silica in experimental animals and limited evidence in humans IARC Monographs on the Evaluation of the carcinogenicity of crystalline silica to humans, IARC Class 2A.

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### **OTHER**

#### **HEALTH EFFECTS:**

Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also, lung scarring produced by such inhalation may lead to progressive massive fibrosis of the lung which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by heart enlargement, heart failure and pulmonary failure. Smoking aggravates the effects of exposure.

### **5. FIRE FIGHTING MEASURES AND EXPLOSION HAZARD DATA**

**FLASH POINT (METHOD):** Not Flammable

**FLAMMABILITY LIMITS:** Lower: Not applicable      Upper: Not Applicable  
(Vol. & air, 1 bar, 68 deg-F)

**EXTINGUISHING MEDIA:** Not Applicable

**FIRE FIGHTING INSTRUCTIONS:** Not Applicable

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Not Applicable

#### **HAZARDOUS**

**PRODUCTS/COMBUSTION:** Thermal decomposition may yield carbon monoxide, carbon dioxide, other oxides of carbon.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **ACTIONS TO TAKE FOR SPILLS /LEAKS:**

See Sections 4, 8 and 11 for hazards and exposure controls. Sweep up spills and transfer to container for recovery. Keep dusting to a minimum.

### **7. PRECAUTIONS FOR SAFE HANDLING AND STORAGE**

**STORAGE:** Store in a cool dry place.

**HANDLING:** Do not eat, drink, smoke, or chew tobacco around material. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust.

### **8. EXPOSURE CONTROLS, PERSONAL PROTECTION**

**EYE PROTECTION:** Eye protection with side shields is recommended. (ANZI Z87.1, 1968)

**PROTECTIVE GLOVES:** General use of gloves (e.g. cotton or canvas) is recommended to protect the skin from drying and irritation.

**RESPIRATORY:** Atmospheric levels should be maintained below the exposure limits listed in Section 11 by using engineering controls. When limits are exceeded, use a MSHA/NIOSH approved respirator.

**OTHER PROTECTION:** To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE standard 29CFR1910.132 be conducted before using this product.

**VENTILATION:** Provide local exhaust ventilation at the source of dust and fumes to maintain airborne levels below the exposure levels of section 2. Refer to "Industrial Ventilation" by ACGIH for a manual of recommended practices.

#### **PERSONAL HYGIENE/ WORK PRACTICES:**

Establish good personal hygiene and work practices. Always wash hands and face before eating, drinking or smoking.

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## 9. CHEMICAL AND PHYSICAL PROPERTIES

**BOILING POINT:** Not Applicable  
**MELTING POINT:** Not Applicable  
**SOL. IN WATER:** Not Soluble  
**VAPOR PRESSURE:** Not Applicable  
**AUTO IGNITION TEMP:** Not Applicable  
**FLASH POINT:** Not Applicable  
**APPEARANCE/ODOR:** Off white or grey sand, granular, crushed, or ground. No odor or taste.  
**DENSITY 68 deg-F(20 deg-C):** 22-24 lbs./gal  
**VAPOR DENSITY:** Not Applicable  
**SPECIFIC GRAVITY:** 2.65-2.85  
**EVAPORATION RATE:** Not Applicable  
**VISCOSITY 68 deg-F (20 deg-C):** Not Applicable

## 10. STABILITY AND REACTIVITY

**STABILITY:** This product is stable.  
**INCOMPATIBILITY:** Contact with powerful oxidizing agents such as fluorine, chlorine, trifluoride, manganese trioxide, oxygen difluoride may cause fires.  
**HAZARDOUS PRODUCTS OF DECOMPOSITION:** None known.  
**HAZARDOUS POLYMERIZATION:** Will not occur.  
**CONDITIONS TO AVOID:** Operations that create dust.

## 11. TOXICOLOGICAL INFORMATION

CHEMICAL NAME	Toxicity Data		LC50	Exposure Limits	
	LD50-oral	LD50-dermal		PEL	TLV
Quart Sands and Flour	Not Established	Not Established	Not Established	0.3 mg/M <sup>3</sup> 0.1 resp. dust	0.3 mg./M <sup>3</sup> 0.1 resp. dust

Wetting Agent                      Not Established                      Not Established                      Not Established                      Not Established                      Not Estab.

**Carcinogenicity:**  
IARC.....Class 2A                      OSHA .....No  
NTP .....Yes                              ACGIH.....No

## 12. ECOLOGICAL INFORMATION

**GENERAL:** ----CERCLA/SARA requires notification to the appropriate Federal, state, and local authorities of releases hazardous or extremely hazardous quantities equal to or greater than the Reportable Quantities (RQs) in 40 CFR 302.4 and 40 CFR 355.  
----SARA Title 313 requires submissions of annual reports of releases of toxic chemicals that appear in 40 CFR 372. Components presents in this product at a level that could require reporting under statute are listed in Section 16.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of in accordance with all local, state and federal regulations. Contact Res-Tek Inc. at (888) 737-8351 for assistance with disposal requirements.

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## 14. TRANSPORT INFORMATION

**PRIMARY HAZARD:** None                      **SECONDARY HAZARD:** None  
**DOT SHIPPING NAME:** Sand, NOI                      NMFC: 90220  
**HAZARD CLASS:** N/A                      **UN#:** N/A                      **UN CLASS:** N/A                      **PG#:** N/A  
**49 CFR REFERENCE:** N/A  
**LABEL(S):** None                      **PLACARD(S):** N/A  
**IATA SHIPPING RESTRICTIONS:** N/A  
**AUTHORIZED CONTAINER TYPE(S):** N/A

## 15. REGULATORY INFORMATION

Substance Description	DSL	TSCA	MA	NJ-RTK	PA	FL	CA	MN	RI	SARA
Quartz Sands and Flour	L	L	L	sn 1660	L	L	NL	L	NL	NL
Wetting Agent	L	L	NL	NL	NL	NL	NL	NL	NL	NL

DSL	Domestic Substances List – Canada	PA	Penn. Hazardous substance List	RI	Rhode Island Hazardous Substance List
TSCA	Toxic Substance control Act	FL	Florida Hazardous Substance List	SARA	SARA Title III, Section 313
MA	Massachusetts Substance List	CA	California-Directors List of Hazardous Sub.	L	Listed
NJ RTK	New Jersey Right to Know Hazard Sub.	MN	Minnesota Hazardous Substance List	NL	Not Listed

**OTHER REGULATORY INFORMATION:**                      **WHMIS HAZARD CLASS:**  
NFPA HEALTH                      1                      NFPA REACTIVITY                      0  
NFPA FLAMMABILITY                      0                      NFPA OTHER                      0

Hazard Index: 4-severe, 3-high, 2-moderate, 1-slight, 0-insignificant

## 16. ADDITIONAL INFORMATION

**FOR INDUSTRIAL USE ONLY!**  
**KEEP OUT OF REACH OF CHILDREN!**  
**THRESHOLD ODOR LIMIT OF THIS PRODUCT IS LESS THAN 1 PPM.**

CERCLA reporting:                      RQ = 1000# for Methyl methacrylate

**THIS MATERIAL IS IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT AND DOMESTIC SUBSTANCE LIST - CANADA**

1996 North American Emergency Response Guide Number 127

For additional product safety or use information, contact Res-Tek Inc. at the address or phone number listed on page #1.

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