

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Silicon dioxide, chemically prepared
Product Name / Trade Name	RT-Aerosil
CAS No.	112945-52-5, 7631-86-9

Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Thickening agent for industrial flooring resins.
Uses Advised Against	None

Details of the supplier of the safety data sheet

Company Identification	Res-Tek, Inc. 110 Riverside Drive Cartersville, Georgia 30120 United States of America
Telephone	1-888-737-8351 / 1-770-427-4034

Emergency telephone number

CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)	Not a hazardous substance or mixture.
Target Organs	Not applicable.

Label elements

Hazard Symbol	None.
Signal Word(s)	None.
Hazard Statement(s)	None.
Precautionary Statement(s)	None.

Other hazards

No data available.

Additional Information

A new CAS, 112945-52-5, has been assigned to amorphous, fumed silica to distinguish it from crystalline silica. According to the EPA, this product meets TSCA requirements and is listed on the TSCA inventory as silica with CAS 7631-86-9.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition/information on ingredients	%W/W	CAS No.	Hazard Statement(s)
Not relevant.	Not relevant.	Not relevant.	Not relevant.

For full text of H phrases see section 16.

Additional Information - None

SECTION 4: FIRST AID MEASURES



Description of first aid measures

General	When in doubt or if symptoms are observed, get medical advice.
Inhalation	In case product dust is released: Possible discomfort: cough, sneezing Move victims into fresh air.
Skin Contact	After contact with skin, wash immediately with plenty of water and soap.
Eye Contact	Irrigate thoroughly with water. Seek medical attention if symptoms persist.
Ingestion	Rinse mouth immediately and drink plenty of water. When in doubt or if symptoms are observed, get medical advice.

Note to Physician

Treat symptomatically.

Indication of any immediate medical attention and special treatment needed

No known symptoms to date.

Routes of entry:

Not relevant.

Potential Health Effects:

Inhalation	No known symptoms to date.
Skin	No known symptoms to date.
Eyes	No known symptoms to date.
Ingestion	No known symptoms to date.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media	Not flammable or combustible. Use an extinguishing agent suitable for the surrounding fire.
-Unsuitable Extinguishing Media	High power water jet.

Special hazards arising from the substance or mixture

None known.

Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Wear personal protective equipment.

Environmental precautions

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil. Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

Methods and material for containment and cleaning up

Take up mechanically. Avoid generation of dust.

Additional Information

None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid generation of dust. During filling, metering and sampling appropriate ventilation should be

used if possible.

Precautions against fire and explosion

Take precautionary measures against static discharges.

Additional Information

Avoid generation of dust.

Conditions for safe storage, including any incompatibilities

-Storage temperature

Store in a cool, dry place. Store in original container. Open carefully.

-Incompatible materials

None known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Silicon dioxide, chemically prepared	112945-52-5 7631-86-9	5 mg/m3 (Respirable Dust) 15 mg/m3 (Total Dust)	-	-	-	

- STEL: Short Term Exposure Limit; IFV = Inhalable Fraction & Vapor

Exposure controls

Appropriate engineering controls

Work in well ventilated zones or use proper respiratory protection.

Personal protection equipment

Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Hand and body protection is not required.

Respiratory protection



In case of inadequate ventilation wear a NIOSH approved quarter or half face dust mask or respirator appropriate for use concentration. If the concentration exceeds the dust mask or respirator capability a full face supplied air respirator must be used.

Thermal hazards

Not normally required.

Environmental Exposure Controls

No additional measures necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Powder.
Color.	White.
Odor	Odorless.
Odor Threshold (ppm)	Not applicable.
pH (Value)	3. 7 – 4.5 (40 g/L, 20°C Suspension)
Melting Point (°C) / Freezing Point (°C)	1,700°C
Boiling point/boiling range (°C):	Not available.
Flash Point (Closed Cup, °C)	Not applicable.

Evaporation Rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Explosive Limit Ranges	Not applicable.
Vapour pressure (mmHg)	Not applicable.
Vapour Density (Air=1)	Not applicable.
Density (g/ml)	2.2 at 20 °C (68 °F) (18.36 lb/gal @ 68 °C)
Specific Gravity	2.2
Solubility (Water)	>1 mg/L.
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not applicable.
Auto Ignition Point (°C)	Not applicable.
Decomposition Temperature (°C)	>2,000°C.
Kinematic Viscosity (mm ² /s)	Not applicable.
Dynamic Viscosity (mPa.s)	Not applicable.
Explosive properties	Not applicable.
Oxidizing properties	Not oxidizing.
Other information	None.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Not to be expected.
Conditions to avoid	Operations that create dust.
Incompatible materials	None known.
Hazardous decomposition product(s)	None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes:

Exposure symptoms: Not relevant.

Information on toxicological effects

Acute toxicity (estimated / calculated)	LD50 (Oral): >3,300 mg/kg (rat) LD50 (Oral): >5,000 mg/kg (rat, OECD Test Guideline 401) LC50 (Inhalation): 0.139 mg/L/4 hr (rat) No deaths occurred. LD50 (Dermal): >5,000 mg/kg (rabbit)
Corrosivity / Irritation	Prolonged exposure not likely to cause significant skin irritation. Corneal injury is unlikely.
Sensitization	Not sensitizing.
Repeated dose toxicity	Oral: No negative effects. Inhalation: No irreversible changes and no indication of silicosis. no evidence of mutagenic effects
Mutagenicity	
Carcinogenicity	

NTP	IARC	ACGIH	OSHA
No.	No.	No.	No.

Toxicity for reproduction	No indications of human reproductive toxicity exist.
Other information	The classification criteria are not met based on the available data.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity (estimated / calculated)

LC50 (Brachydanio rerio): > 10000 mg/l / 96 hr. Method: OECD 203.
The reported toxic effects relate to the nominal concentration.

Long Term Toxicity

EC50 Daphnia magna: > 1000 mg/l / 24 hr. Method: OECD 202. The reported toxic effects relate to the nominal concentration.
Not relevant.

Persistence and degradability

Not persistent.

Theoretical Oxygen demand

Not applicable.

Biological oxygen demand (BOD)

Not applicable.

Partition Coefficient: n-octanol/water (log Kow):

Not applicable.

Bioaccumulative potential

No indication of bioaccumulation potential.

Mobility in soil

Not relevant.

Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

Partition Coefficient (Koc)

Not applicable.

Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

Additional Information

None known.

SECTION 14: TRANSPORT INFORMATION

	Land transport (U.S. DOT)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	Not a dangerous good	Not a dangerous good	Not a dangerous good
Proper Shipping Name			
Transport hazard class(es)			
Packing group			
Environmental hazards			
Special precautions for user			
DOT Placard			

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not a dangerous good.

* Reportable Quantity (RQ) substance

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
Not relevant			

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
Not relevant		

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)	TPQ (Pounds)
Not relevant	-----	-----	-----	-----

Proposition 65 (California):

Chemical Name	CAS No.	Typical %wt.	Hazards
Not relevant	-----	-----	-----

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1 - 16.

Date of preparation: February 7, 2019

Hazard Statement(s) Listed in: SECTION 3
Not relevant.

Additional Information: None.

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