

ZEOSIL (ALL GRADES)

Date Prepared: 9/14/10

Supersedes Date: 11/19/09

1. PRODUCT AND COMPANY IDENTIFICATION

RHODIA INC., MEMBER OF THE SOLVAY GROUP
SILCEA
CN 7500
8 Cedar Brook Drive
Cranbury, NJ 08512-7500 US

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT
CONTACT: CHEMTREC (800-424-9300 within the United States or
703-527-3887 for international collect calls) or Rhodia CAERS
(Communication and Emergency Response System) at 800-916-3232.

For Product Information:

609-860-4125

Chemical Name or Synonym:

PRECIPITATED AMORPHOUS SILICA; SILICA GEL,PPTD.,CRYST.-FREE

Molecular Formula:SiO₂.H₂O**2. HAZARDS IDENTIFICATION****A. EMERGENCY OVERVIEW:****Physical Appearance and Odor:**

white powder solid, odorless.

Warning Statements:CAUTION! DUSTS IN HIGH CONCENTRATIONS MAY CAUSE SKIN, EYE AND
RESPIRATORY TRACT IRRITATION.**B. POTENTIAL HEALTH EFFECTS:****Acute Eye:**

May cause irritation.

Acute Skin:

May cause irritation, dryness.

Acute Inhalation:

May cause upper respiratory tract irritation.

Acute Ingestion:

Practically non-toxic.

Chronic Effects:

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	OSHA Hazard	% WT/WT
PRECIPITATED AMORPHOUS SILICA	112926-00-8	Y	>= 96
(ALTERNATE CAS #)	7631-86-9	Y	
WATER	7732-18-5	N	BALANCE

4. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:**Eye Exposure:**

Rinse particulate matter from eye. Seek medical attention if irritation develops or persists or if visual changes occur.

Skin Exposure:

In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops or persists.

Inhalation:

If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Ingestion:

Do not induce vomiting, unless directed to do so by a physician. If victim is conscious and alert, wash out mouth with water and keep at rest. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side. Seek medical attention.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically. No specific antidote available.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:
Not Applicable

Extinguishing Media:
Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:
Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards:
Not combustible. When transferring dry powders, be sure that both the unloading vessel and receiving vessel are properly grounded to avoid build-up of static electric charge. In particular, avoid the potential of dry powder and friction causing static electricity discharge in the presence of flammables. (See NFPA-77).

Hazardous Decomposition Materials (Under Fire Conditions):
none known

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:
Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:
Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:
Sweep up and place in an appropriate closed container (see Section 7: Handling and Storage). Avoid creation of dusty conditions.

Environmental and Regulatory Reporting:
If spilled on the ground, the affected area should be scraped clean and placed in a appropriate container for disposal.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:

Not Available

Handling:

Avoid direct or prolonged contact with skin and eyes. Avoid breathing dusts. Use nonsparking tools and grounded/bonded equipment and containers when transferring.

Dry powders can build static electricity charges when subjected to the friction of conveying, mixing or sliding. Provide adequate precautions, such as electrical grounding, or inert atmospheres when material is used in the presence of flammable materials to prevent ignition.

Storage:

Store in tightly closed containers. Store in an area that is cool, dry.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

PRECIPITATED AMORPHOUS SILICA

	Notes	TWA	STEL
OSHA		6 mg/cu m	

PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION

	Notes	TWA	STEL
OSHA		5 mg/cu m	

PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST

ZEOSIL (ALL GRADES)

OSHA	Notes	TWA	STEL
		15 mg/cu m	
PARTICLES (INSOLUBLE OR POORLY SOLUBLE) NOT OTHERWISE SPECIFIED, RESPI			
ACGIH	Notes	TWA	STEL
		3 mg/cu m	
PARTICLES (INSOLUBLE OR POORLY SOLUBLE) NOT OTHERWISE SPECIFIED, INHAL			
ACGIH	Notes	TWA	STEL
		10 mg/cu m	

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: local exhaust ventilation at the point of generation.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): Air-purifying (half-mask/full-face) respirator with cartridges/canister approved for use against dusts, mists and fumes.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

ZEOSIL (ALL GRADES)

- (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance:
white powder solid.

Odor:
odorless.

pH:
5 to 9 at 5 wt/wt%.

Specific Gravity:
2 at 20 C (68 F).

Water Solubility:
sparingly soluble
0.1 wt/wt% at 20 C (68 F).

Melting Point Range:
> 1700 C (3092 F)

Boiling Point Range:
2230 C (4046 F) at 760 mmHg

Vapor Pressure:
Not Available

Vapor Density:
Not Available

Octanol/Water Partition Coefficient:
Not Available

10. STABILITY AND REACTIVITY

Chemical Stability:
This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

ZEOSIL (ALL GRADES)

none known

Materials/Chemicals To Be Avoided:

chlorine trifluoride
fluorine
hydrogen fluoride
oxygen difluoride
strong oxidizing agents

The Following Hazardous Decomposition Products Might Be Expected:

Decomposition Type: thermal

none known

Hazardous Polymerization Will Not Occur.

Avoid The Following To Inhibit Hazardous Polymerization:

not applicable

11. TOXICOLOGICAL INFORMATION**Acute Eye Irritation:**

No test data found for product.

Acute Skin Irritation:

No test data found for product.

Acute Dermal Toxicity:**Toxicological Information and Interpretation**

LD50 - lethal dose 50% of test species, > 5000 mg/kg, rabbit.

Acute Respiratory Irritation:

No test data found for product.

Acute Inhalation Toxicity:

No test data found for product.

Acute Oral Toxicity:**Toxicological Information and Interpretation**

LD50 - lethal dose 50% of test species, > 5000 mg/kg, rat.

Chronic Toxicity:**Mutagenicity:**

In vitro and in vivo tests did not reveal any genotoxic potential.

Reproductive toxicity:

The fertility and reproductive toxicity test did not reveal any effect on reproduction.

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

ZEOSIL (ALL GRADES)

Toxicological Information and Interpretation
No significant adverse effects were observed.

12. ECOLOGICAL INFORMATION**Ecotoxicological Information:****Ecotoxicological Information and Interpretation:**

EC50 - effective concentration 50% of test species, > 1000 mg/l/24 hr, freshwater invertebrate *Daphnia magna* (water flea).

Data for amorphous silica.

EC50 - effective concentration 50% of test species, > 10000 mg/l/96 hr, fish: *Brachydanio rerio* (Zebrafish).

Chemical Fate Information:

Mobility: Precipitation: Slightly soluble product, readily forms deposits. Expected behavior of the Product: Ultimate degradation of the product: Soil and sediment.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method:**

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

EPA Hazardous Waste - NO

14. TRANSPORT INFORMATION

Transportation Status: IMPORTANT! Statements below provide additional data on listed transport classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US DOT:

Shipping Name: NOT REGULATED

TDG:

Shipping Name: NON DANGEROUS

IMO:

ZEOSIL (ALL GRADES)

Shipping Name: NOT REGULATED

IATA:
Shipping Name: NOT REGULATED**15. REGULATORY INFORMATION****Inventory Status**

Inventory	Status
UNITED STATES (TSCA)	Y
CANADA (DSL)	Y
EUROPE (EINECS/ELINCS)	Y
AUSTRALIA (AICS)	Y
JAPAN (MITI)	Y
SOUTH KOREA (KECL)	Y

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS**Inventory Issues:**

All functional components of this product are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard	- NO
Reactive Hazard	- NO
Release of Pressure	- NO
Acute Health Hazard	- YES
Chronic Health Hazard	- NO

STATE REGULATIONS:

This product does not contain any components that are regulated under California Proposition 65.

16. OTHER INFORMATION**National Fire Protection Association Hazard Ratings--NFPA(R):**

1	Health Hazard Rating--Slight
0	Flammability Rating--Minimal
0	Instability Rating--Minimal

National Paint & Coating Hazardous Materials Identification System--HMIS(R):

ZEOSIL (ALL GRADES)

1 Health Hazard Rating--Slight
0 Flammability Rating--Minimal
0 Reactivity Rating--Minimal

Reason for Revisions:

Change and/or addition made to Section 4.

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
TLV - Threshold Limit Value
PEL - Permissible Exposure Limit
TWA - Time Weighted Average
STEL - Short Term Exposure Limit
NTP - National Toxicology Program
IARC - International Agency for Research on Cancer
ND - Not determined
RHODIA - Rhodia Established Exposure Limits

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.

****End Of MSDS Document****