INEOS Silicas

REF: #HYD801.1

MATERIAL SAFETY DATA SHEET

Date of Issue: March 2004, Rev. No: 9
Emergency Phone: (815) 727-3651

1. Product & Company Identification

Chemical Name:	Silicon Dioxide
Chemical Formula:	SiO_2
Synonyms:	Silica Gel Silicon Dioxide Amorphous
Trade Names:	LUCILITE®, CHILL-GARDE®, LUCILITE®PC5, LUCILITE® PC6, LUCILITE® PC8, LUCILITE® PC9, CHILL-GARDE® FG6, SD615JB, CHILL-GARDE® FG8, Gasil WB615
CAS Number:	112926-00-8*
Co. Identification:	INEOS Silicas Americas 111 Ingalls Avenue Joliet, IL 60435
Emergency Number:	INEOS – (815) 727-3651
(24 hours)	ChemTrec (800) 424-9300

2. Composition & Information on Ingredients

Ingredients		**Case Number**
35 - 50%	Silicon Dioxide, Amorphous Synthetic	112926-00-8*
50-65%	Water	7732-18-5

3. Hazardous Identification

Warning:
Can cause irritation to eyes, dry skin, or discomfort if inhaled. Risk of static electric discharge. Ensure adequate grounding when transferring material in flammable atmosphere.

Ventilation:
Working area should be well ventilated. Local exhaust (e.g. dust collection system) should be employed as appropriate to minimize dust levels in the working area.

Personal Protection:
Follow the rules of good chemical practice for the safe handling of chemicals.

- Wear suitable protective clothing
- Wear chemical safety glasses
- Practice good personal hygiene
- Avoid inhalation of dust

4. Stability & Reactivity

Stability:
This material is stable at ambient temperature and atmosphere pressure.

Hazardous Decomposition Products: None

Hazardous Polymerization: None

Materials and Conditions to Avoid:
This material will react with hydrofluoric acid and strong alkaline solutions.

5. Fire & Explosion Information

Fire:
This material is not considered flammable nor will it support combustion.

Explosion:
Risk of static electric discharge. Ensure grounding when transferring material in flammable atmospheres.

Flashpoint: Not Applicable

Flammable Limits in Air: Not Applicable

Fire Fighting Medium:
Water Foam Dry Powder $C0_2$ etc.

Special Fire Fighting Procedures:
Not Applicable

6. First Aid Procedure

Ingestion:
Do not induce vomiting. Wash mouth out with water, give ½ pint water to drink, and obtain medical attention.

Inhalation:
Move victim to fresh air and rest. If victim has difficulty breathing, provide breathing assistance and obtain immediate medical attention.

Skin Contact:
Wash with plenty of water. Obtain medical attention if irritation persists.

Eye Contact:
Wash with plenty of water. Seek medical attention if irritation arises.

7. Accidental Release Measures

Leaks and Spillages:
Sweep up and place in closed container for disposal at approved place. Last traces can be washed to waste with plenty of water. Wear gloves, goggles and dust respirator.

8. Physical & Chemical Properties

Appearance:	fine white powder
Odor:	odorless
Solubility:	not soluble in water
pH (5%) AQ Suspension:	3.0 – 8.0
Boiling Point:	Silica, not applicable
Melting Point:	Silica > $1000^{o}C$
Specific Gravity:	2.1
Vapor Density:	Not Applicable
Vapor Pressure:	Not Applicable

9. Ecological Information

Synthetic amorphous silicas is virtually inert and has no known adverse effects on the environment.

***NOTE**: 1990 CAS Chemical Abstract Service added additional CAS Numbers to differentiate the many amorphous silicas covered by CAS 7631-86-9. CAS 112926-00-8 identifies amorphous silica gel or precipitate containing 0% crystalline silica.

10. Exposure Controls & Personal Protection

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL: 6-mg/m^3 total dust, (8 hr. TWA)
29 CFR Part 1910.1000

ACGIH TWA: 10 mg/ m^3 total dust, (8 hr. TWA)
ACGIH 1993-94

Not listed as a carcinogen: IARC, NTP, OSHA

ROUTES OF EXPOSURE

Ingestion:
All food should be kept in a separate area, away from the working location. Eating, drinking, and smoking should be prohibited in areas where there is potential for significant exposure to this material. Before eating, hands should be washed.

Inhalation:
This material should be handled in well-ventilated areas. In areas where adequate ventilation is not possible and there is a possibility of dust generation, control of exposure can be achieved through the use of a NIOSH approved particulate respirator.

Skin Contact:
Skin contact should be prevented through the use of suitable protective clothing, gloves or barrier creams.

Eye Contact:
Eye contact should be prevented through the use of chemical safety glasses, goggles, or a facemask.

11. Toxicological Information

Ingestion:
The lethal dose for humans is estimated at over 15000 mg/kg. Synthetic amorphous silica is a permitted food additive in the UK, US, and many other countries. It has been fully evaluated by the UN Codex Alimentarius Commission and given clearance for use as a food additive.

Inhalation:
Synthetic amorphous silica has little adverse effect on lungs and does not produce significant disease or toxic effect when exposure is kept under reasonable control. However, existing medical conditions (e.g. asthma, bronchitis) may be aggravated by exposure to dust. Effects of dust may be greater and occur at lower levels of exposure in smokers compared to non-smokers. Further information can be found in the ACGIH publication “Documentation of the Threshold Limit Values and Biological Indices – Fifth Edition”. IARC have evaluated the carcinogenic risks of silica (Volume 42) and concluded that there is inadequate evidence for the carcinogenicity of amorphous silica.

Skin Contact:
Prolonged contact may have a drying effect on the skin and mucous membranes.

Eye Contact:
May cause discomfort and mild irritation.

12. Disposal Considerations

Waste Disposal Method:
By landfill at approved site, if State/local laws permit.

13. Transport Information

No special packaging requirements. Not classified as hazardous under DOT or US Transport Recommendations.

DOT Proper Shipping Name:	N/A
DOT Hazard Class:	N/A
DOT I.D. Number:	N/A
DOT Hazardous Substance:	N/A

14. Regulatory Information

Information required by Federal, State or Local Regulation.

SARA/Title III Hazard Categories: HMIS Hazard Rating

Immediate (acute) Health:	No
Reactive Hazard:	No
Delayed (chronic) Health:	No
Sudden Release of Pressure:	No
Fire Hazard:	No
Health Hazard:	1
Fire Hazard:	0
Reactivity:	0

This material is listed on TSCA Inventory, Canadian DSL, Japanese MITI, European ENICS, Australian AIC, and Korean, Philippine and Mexico as Silica Gel CAS No. 7631-86-9.

15. Storage Information

Containers should be stored in a cool, dry, well ventilated area.

16. Additional Information

OSHA Standard 29 CFR 1910.1200
Requires that information be provided by employees regarding the hazards of chemicals by means of a Hazard Communication Program, including labeling, Material Safety Data Sheets, training, and access to written records. We request that you, and it is your legal duty, make all information in this Material Safety Data Sheet available to your employees.

17. Further Information

Manufacturer
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Joliet, IL 60435
PH: 815-727-3651
FX: 815-727-5312

MSDS Preparation
SHE Manager