

1. Product & Company Identification

Chemical Name: Silicon Dioxide Amorphous
Synthetic Polyvinylpyrrolidone

Chemical Formula: SiO₂ plus Polymer

Synonyms: Silica Gel
Silicon Dioxide Amorphous
Synthetic plus Polymer

Trade Names: SYNSTAR Stabilizer

CAS Number: 112926-00-8*

Co. Identification: Brewers Supply Group
800 First Street
Shakopee MN 55379
1-800 374 2739

Emergency Number: 1-925 785 4541
(24 hours)

2. Composition & Information on Ingredients

Ingredients	CAS Number
>75% Silicon Dioxide, Amorphous Synthetic	112926-00-8*
<25% Polyvinylpyrrolidone	9003-39-8
<5% 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

Combustion could generate oxides of nitrogen and carbon.

Hazardous Polymerization:

None

Materials and Conditions to Avoid:

Strong oxidizing agents, temperatures in excess of 75C and static discharges.

5. Fire & Explosion Information

Fire:

If involved in a fire may support combustion until the polymer has burned off.

Explosion:

Risk of static electric discharge. Ensure grounding when transferring material in flammable atmospheres. Dust clouds are flammable and may be explosive.

Flashpoint:

Not Applicable

Flammable Limits in Air:

L.E.L. 500 gm/m³

U.E.L. Not Applicable

Fire Fighting Medium:

Water Foam Dry Powder CO₂ etc

Special Fire Fighting Procedures:

If involved in a fire, after extinguishing flames, material should be cooled sufficiently to prevent re-ignition.

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:

odourless

Solubility:

not soluble in water

pH (5%) Aqueous Suspension:

3.0 - 10.0

Boiling Point:

Silica, not applicable

Melting Point:

Silica >1000°C

Specific Gravity:

2.1

Vapor Density:

Not Applicable

Vapor Pressure:

Not applicable

9. Ecological Information

Synthetic amorphous silica 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

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:

Synthetic amorphous silica and polyvinylpyrrolidone are not considered to be harmful by ingestion. The lethal dose for humans for synthetic amorphous silica is estimated at over 15000 mg/kg.

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.

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 unless shipped in packages greater than 3 cubic meters.

OSHA PEL: 6-mg/m³ total, (8 hr. TWA)
29 CFR Part 1910.1000
ACGIH TWA: 10 mg/m³ total dust, (8 hr. TWA)
ACGIH 1993-94

Packages <3m³

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

Packages >3m³

DOT Proper Shipping Name:
Self-heating solid, organic, n.o.s. (Silicon Dioxide, Amorphous containing Polyvinylpyrrolidone)
DOT Hazard Class: 4.2
DOT I.D. Number: UN 3088
DOT Packaging Group: III

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:	1
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 and Polyvinylpyrrolidone CAS No. 9003-39-8.

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 labelling, 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

Brewers Supply Group
800 First Street
Shakopee MN 55379

MSDS Preparation

Ian L Ward

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US AND IS BELIEVED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM ITS USE. BREWERS SUPPLY GROUP SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES.