

MATERIAL SAFETY DATA SHEET



Bayer MaterialScience

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Product Safety & Regulatory Affairs
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USA

TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300
INTERNATIONAL: (703) 527-3887

NON-TRANSPORTATION

Emergency Phone: Call Chemtrec
Information Phone: (800) 662-2927

1. Product and Company Identification

Product Name: BAYTEC SIL 100 WHITE
Material Number: 82387049

2. Hazards Identification

Emergency Overview

Warning Color: White, to, Dark Gray **Form:** liquid viscous **Odor:** Petroleum, Solvent.
Combustible. May cause eye, skin, and respiratory tract irritation. Also harmful by inhalation and if swallowed. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Toxic gases/fumes may be given off during burning or thermal decomposition. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Vapors or mist may be a fire and explosion hazard when exposed to high temperature or ignition. Closed container may forcibly rupture under extreme heat. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or fatal. May affect nervous system. May cause lung damage. May cause liver damage. Contains material which may cause cancer.

Potential Health Effects

Primary Routes of Entry: Skin Contact, Eye Contact, Ingestion, Inhalation

Medical Conditions Aggravated by Exposure: Skin disorders, Respiratory disorders, Eye disorders

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation

Acute Inhalation

For Product: BAYTEC SIL 100 WHITE

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. Inhalation of the solvents may cause central nervous system depression with symptoms of nausea, lightheadedness, drowsiness, dizziness and loss of co-ordination.

For Component: Organic Solvent

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

For Component: Crystalline Quartz Silica

May be harmful by inhalation. May cause mechanical irritation.

Chronic Inhalation

For Product: BAYTEC SIL 100 WHITE

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or fatal.

Skin

Acute Skin

For Component: Organic Solvent

May cause irritation with symptoms of reddening and itching.

For Component: Crystalline Quartz Silica

May cause mechanical irritation.

Eye

Acute Eye

For Component: Organic Solvent

May cause irritation with symptoms of reddening, tearing and stinging.

For Component: Crystalline Quartz Silica

May cause mechanical irritation.

Ingestion

Acute Ingestion

For Product: BAYTEC SIL 100 WHITE

Ingestion and/or vomiting may cause aspiration into the lungs resulting in chemical pneumonitis (inflammation of the lungs).

For Component: Organic Solvent

May cause irritation; Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

For Component: Crystalline Quartz Silica

Not expected to be harmful if swallowed.

Chronic Ingestion

For Product: BAYTEC SIL 100 WHITE

Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage.

For Component: Organic Solvent

May cause liver damage.

General Effects of Exposure

Acute Effects of Exposure

For Component: Crystalline Quartz Silica

Exposure to Silica, Quartz can cause a very serious lung disease called Silicosis with cough, shortness of breath, and changes in chest x-ray. The earliest symptoms of silicosis may include: Shortness of breath, coughing, wheezing, fatigue, chest pain, loss of appetite and fever.

Chronic Effects of Exposure

For Component: Crystalline Quartz Silica

Excessive exposure to airborne crystalline silica can cause fibrotic lung damage, with scarring of the lungs with cough and shortness of breath. This is called "Silicosis". This is generally a slowly developing fibrotic disease as symptoms are usually delayed for 10 years or more. Symptoms are dyspnea, chest pain, breathlessness, and cough. The chronic lung scarring developed from the silica dust causes a progressive massive fibrosis. This may lead to increased susceptibility to tuberculosis.

Carcinogenicity:

Crystalline Quartz Silica **NTP** - Hazard Designation: Known To Be Human Carcinogen.
IARC - Overall evaluation: 1 Carcinogenic to humans.

3. Composition/Information on Ingredients

Hazardous components

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
60 - 100%	Organic Solvent	CAS# is a trade secret
25 - 35%	Crystalline Quartz Silica	14808-60-7
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25 - 35%	Crystalline Quartz Silica	14808-60-7

4. First aid measures

Eye contact

In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

Skin contact

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention. Wash clothing and shoes before reuse.

Inhalation

If inhaled, remove to fresh air. Get medical attention if irritation develops.

Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

5. Firefighting measures

Suitable extinguishing media: All extinguishing media are suitable.

Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Unusual Fire/Explosion Hazards

Combustible Liquid. Vapors or mist may be a fire and explosion hazards when exposed to high temperature or ignition. Toxic and irritating gases/fumes may be given off during burning or thermal

decomposition. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback. Vapors or fumes may form explosive mixture with air.

6. Accidental release measures

Spill and Leak Procedures

Cleanup personnel must use appropriate personal protective equipment. Remove all sources of ignition, including flames, heat, and sparks. Dike or dam spilled material and control further spillage, if possible. Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Wash spill area with soap and water.

7. Handling and storage

Storage temperature:

maximum: 25 °C (77 °F)

Storage period

12 Months

Handling/Storage Precautions

Keep away from heat, sparks and open flames. Ground and bond containers and equipment before transferring to avoid static sparks. Avoid inhalation of vapour or mist. Avoid contact with eyes. Avoid contact with skin or clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use.

Further Info on Storage Conditions

Use spark-proof tools and explosion-proof equipment. Store separate from food products. Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

8. Exposure controls/personal protection

Crystalline Quartz Silica (14808-60-7)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 0.025 mg/m³ (Respirable fraction.)

US. ACGIH Threshold Limit Values

Hazard Designation: Group A2 Suspected human carcinogen.

Industrial Hygiene/Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Curing ovens must be ventilated to prevent the build up of explosive atmospheres and to prevent off gases from entering the work place.

Respiratory protection

Respiratory protection is required in insufficiently ventilated working areas and during spraying. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. At higher concentrations or under uncertain conditions a respirator with independent air supply must be

used.

Hand protection

Permeation resistant gloves., Butyl rubber gloves., Nitrile rubber gloves., Neoprene gloves

Eye protection

Chemical resistant goggles must be worn., Chemical safety goggles in combination with a full face shield if a splash hazard exists.

Skin and body protection

Permeation resistant clothing, Gloves, long sleeved shirts and pants.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. Physical and chemical properties

Form:	liquid
Appearance:	viscous
Color:	White, to, Dark Gray
Odor:	Petroleum, Solvent
Boiling point/boiling range:	154.44 - 196.11 °C (309.99 - 385 °F)
Flash point:	> 65.6 °C (150.08 °F)
Lower explosion limit:	1.1 %(V) for the solvent
Upper explosion limit:	5.0 %(V) for the solvent
Specific Gravity:	1.20
Solubility in Water:	insoluble

10. Stability and reactivity

Hazardous Reactions

Hazardous polymerisation does not occur.

Stability

Stable

Materials to avoid

Strong oxidizing agents, Reducing agents, Isocyanates

Conditions to avoid

Heat, flames and sparks.

Hazardous decomposition products

By Fire and Thermal Decomposition: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke., other aliphatic fragments which have not been determined

11. Toxicological information

Toxicity Data for Crystalline Quartz Silica

Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic

Activation: with/without)

Genetic Toxicity in Vivo:

Sister Chromatid Exchange: ambiguous (hamster)

ambiguous

Carcinogenicity

rat, Male/Female, inhalation, 2 years, 6 hrs/day 5 days/week,

positive

12. Ecological information

Ecological Data for Crystalline Quartz Silica

Additional Ecotoxicological Remarks

No data available for this component.

13. Disposal considerations

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions

Do not heat or cut container with electric or gas torch. Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

14. Transport information

Land transport (DOT)

Proper shipping name:	Combustible liquid, n.o.s. (contains Organic Solvent (Proprietary))
Hazard Class or Division:	Combustible liquid
UN/NA Number:	NA1993
Packaging group:	III
Hazard Label(s):	None

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO/IATA)

Non-Regulated

Additional Transportation Information

49CFR: Applicable for domestic transportation by highway and rail, but not air or vessel. (See 49 CFR 173.150(F)(1)). If the quantity is in a non-bulk packaging (less than 119 gallons), this material ships as non-regulated unless the Combustible Liquid is a Hazardous Substance or a Hazardous Waste. (See 49 CFR 173.150(F)(2)).

15. Regulatory information

United States Federal Regulations

OSHA Hazcom Standard Rating: Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302):

Components

None

SARA Section 311/312 Hazard Categories:

Acute Health Hazard, Chronic Health Hazard, Fire Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Components

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Components

None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261)

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste., In its purchased form, this product meets the criteria of ignitability under 40 CFR 261.21(a), and, when discarded in that form, should be managed as a hazardous waste.

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
60 - 100%	Organic Solvent	CAS# is a trade secret
25 - 35%	Crystalline Quartz Silica	14808-60-7

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
60 - 100%	Organic Solvent	CAS# is a trade secret
25 - 35%	Crystalline Quartz Silica	14808-60-7

MA Right to Know Extraordinarily Hazardous Substance List:

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
25 - 35%	Crystalline Quartz Silica	14808-60-7

California Prop. 65:

Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
25 - 35%	Crystalline Quartz Silica	14808-60-7

16. Other information

NFPA 704M Rating

Health	2
Flammability	2
Reactivity	0
Other	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

HMIS Rating

Health	2*
Flammability	2
Physical Hazard	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

* = Chronic Health Hazard

The method of hazard communication for Bayer MaterialScience LLC is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Bayer MaterialScience LLC as a customer service.

Contact person: Product Safety Department
Telephone: (412) 777-2835
MSDS Number: 112000037132
Version Date: 02/01/2013
Report version: 1.13

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