



# SAFETY DATA SHEET

## 1. Identification

### Product identifier

### Sil-Pad Products

### Other means of identification

#### Product code

Sil-Pad 400, 600, 700, 800, 900S, 950, 980, 1000, 1000L, 1000ST, 1200, 1500, 1500ST, 1750, 1950, 2000, 9516, A1500, A2000, K4, K6, K10, With/without Polyimide, With/without fiberglass, With/without Adhesives AC, AAC, AC2, ACA, EAAC, TAC, TAAC

### Synonyms

Sil-Pad \* SP

### Recommended use

Thermally Conductive and Electrical Insulating Silicone Pad.

### Recommended restrictions

None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

The Bergquist Company

#### Address

18930 West 78th Street  
Chanhassen, MN. 55317

#### Telephone

Non-Emergency calls: 1-800-347-4572

#### E-mail

M-SDSadmin@BergquistCompany.com

#### Emergency phone number

Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: +1 703-527-3887  
(Collect Calls Accepted)

## 2. Hazard(s) identification

### Physical hazards

Not classified.

### Health hazards

Not classified.

### OSHA defined hazards

Not classified.

### Label elements

#### Hazard symbol

None.

#### Signal word

Not applicable.

#### Hazard statement

Not applicable.

#### Precautionary statement

##### Prevention

Observe good industrial hygiene practices.

##### Response

Wash thoroughly after handling.

##### Storage

Store away from incompatible materials.

##### Disposal

Dispose of waste and residues in accordance with local authority requirements.

### Hazard(s) not otherwise classified (HNOC)

None known.

## 3. Composition/information on ingredients

### Mixtures

### Composition comments

The components are not hazardous or are below required disclosure limits.

## 4. First-aid measures

### Inhalation

Move to fresh air. Get medical attention if symptoms occur.

### Skin contact

Wash skin with soap and water. Get medical attention if irritation persists after washing.

### Eye contact

Flush thoroughly with water. If irritation occurs, get medical assistance.

### Ingestion

Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this material does not pose a risk to health.

**Indication of immediate medical attention and special treatment needed**

Treat symptomatically.

**General information**

Get medical attention if any discomfort develops.

## 5. Fire-fighting measures

**Suitable extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

None.

**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

**Fire-fighting equipment/instructions**

Move containers from fire area if you can do so without risk.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

This product is not flammable.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Sweep up or gather material and place in appropriate container for disposal. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Environmental Manager must be informed of all major spillages.

## 7. Handling and storage

**Precautions for safe handling**

Provide adequate ventilation. Avoid inhalation of dust and contact with skin and eyes. Observe good industrial hygiene practices. Wear appropriate personal protective equipment (See Section 8).

**Conditions for safe storage, including any incompatibilities**

Store in closed original container in a dry place. Store away from incompatible materials.

## 8. Exposure controls/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Aluminum oxide (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Barium sulphate (CAS 7727-43-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cobalt chromite blue green spinel (CAS 68187-11-1)	PEL	0.5 mg/m3	
Iron oxide (CAS 1309-37-1)	PEL	10 mg/m3	Fume.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Aluminum oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Barium sulphate (CAS 7727-43-7)	TWA	10 mg/m3	
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	5 mg/m3	Respirable.

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Cobalt chromite blue green spinel (CAS 68187-11-1)	TWA	10 mg/m3 0.5 mg/m3	Total
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cobalt chromite blue green spinel (CAS 68187-11-1)	15 µg/l	Cobalt	Urine	*
	1 µg/l	Cobalt	Blood	*

\* - For sampling details, please see the source document.

<b>Exposure guidelines</b>	Follow standard monitoring procedures.
<b>Appropriate engineering controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Risk of contact: Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	Use suitable protective gloves if risk of skin contact. Suitable gloves can be recommended by the glove supplier.
<b>Other</b>	If prolonged or repeated contact is likely, chemical resistant clothing is recommended.
<b>Respiratory protection</b>	In case of inadequate ventilation, use respiratory protection.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

## 9. Physical and chemical properties

<b>Appearance</b>	Solid.
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Color</b>	Various.
<b>Odor</b>	Slight.
<b>Odor threshold</b>	Not relevant.
<b>pH</b>	Not relevant.
<b>Melting point/freezing point</b>	Not relevant.
<b>Initial boiling point and boiling range</b>	Not relevant.
<b>Flash point</b>	Not relevant.
<b>Evaporation rate</b>	Not relevant.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not relevant.
<b>Flammability limit - upper (%)</b>	Not relevant.
<b>Explosive limit - lower (%)</b>	Not relevant.
<b>Explosive limit - upper (%)</b>	Not relevant.
<b>Vapor pressure</b>	Not relevant.
<b>Vapor density</b>	Not relevant.

<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not relevant.
<b>Partition coefficient (n-octanol/water)</b>	Not relevant.
<b>Auto-ignition temperature</b>	Not relevant.
<b>Decomposition temperature</b>	Not relevant.
<b>Viscosity</b>	Not relevant.
<b>Other information</b>	
<b>Bulk density</b>	Not available.
<b>Density</b>	1.50 - 3.20 (25 °C)
<b>Explosive properties</b>	Not relevant.
<b>Oxidizing properties</b>	Not relevant.
<b>VOC (Weight %)</b>	Not relevant.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Elevated temperatures or mechanical action may form dust and fumes which may be irritating to the mucous membranes and respiratory tract.
<b>Skin contact</b>	Prolonged skin contact may cause temporary irritation.
<b>Eye contact</b>	Elevated temperatures or mechanical action may form dust and fumes which may be irritating to the eye.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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Components	Species	Test Results
Polyalkyl siloxane (CAS 63148-62-9)		
Acute		
Dermal		
LD50	Rabbit	>= 5000 mg/kg
Oral		
LD50	Rat	>= 17000 mg/kg
Skin corrosion/irritation	Not classified.	
Serious eye damage/eye irritation	Not classified.	
Respiratory or skin sensitization		
Respiratory sensitization	Not classified.	
Skin sensitization	Not classified.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	Not classified.	

## IARC Monographs. Overall Evaluation of Carcinogenicity

Iron oxide (CAS 1309-37-1)

3 Not classifiable as to carcinogenicity to humans.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Further information</b>	None known.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous.

Components	Species	Test Results
Barium sulphate (CAS 7727-43-7)		
<b>Aquatic</b>		
Crustacea	EC50 Tubificid worm (Tubifex tubifex)	28.61 - 38.03 mg/l, 48 hours
<b>Persistence and degradability</b>	No data available.	
<b>Bioaccumulative potential</b>	No data available.	
<b>Mobility in soil</b>	The product is insoluble in water.	
<b>Other adverse effects</b>	None known.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
<b>Contaminated packaging</b>	Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

## 15. Regulatory information

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Barium sulphate (CAS 7727-43-7) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Aluminum oxide (CAS 1344-28-1)  
Barium sulphate (CAS 7727-43-7)  
Iron oxide (CAS 1309-37-1)

**US. New Jersey Worker and Community Right-to-Know Act**

Aluminum oxide (CAS 1344-28-1)  
Barium sulphate (CAS 7727-43-7)  
Iron oxide (CAS 1309-37-1)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Aluminum oxide (CAS 1344-28-1)  
Barium sulphate (CAS 7727-43-7)  
Iron oxide (CAS 1309-37-1)

**US. Rhode Island RTK**

Aluminum oxide (CAS 1344-28-1)

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 01-July-2014  
**Revision date** 11-July-2014  
**Version #** 02  
**NFPA ratings**



### References

ESIS (European chemical Substances Information System)  
Registry of Toxic Effects of Chemical Substances (RTECS)  
HSDB® - Hazardous Substances Data Bank

### Disclaimer

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