

# KERRLAB

## Material Safety Data Sheet

in accordance with Community Regulation 2006/1907/EC (R.E.A.Ch.)

Revision Date: 21<sup>th</sup> October 2009

### SECTION 1

#### Product & Company identification

1.1 Product name

**G-400**

1.2 Uses/Application:

Casting Investment

1.3 Company (Name, address and info phone number)

**KERRLAB**

1717 West Collins Avenue

Orange, CA 92867 (U.S.A.)

+39.081.850.8.325

1.4 Emergency phone (according to communitarian directive 99/45/EC, article 17)

+39.081.8508.325 (08.00-17.00, European time, GMT+1)

E-mail address: [safety@kerrhawe.com](mailto:safety@kerrhawe.com)

### SECTION 2

#### Hazard identification

2.1 Hazard classification (according to communitarian directives 67/548/EEC & 99/45/EC)

None.

2.2 Other hazard

See section 11.

### SECTION 3

#### Composition/Information on Ingredients

(according to communitarian directives 67/548/EEC, 99/45/EC & 2001/58/EC)

3.1 Hazardous ingredients

HAZARDOUS INGREDIENTS	%	HAZARD SYMBOLS	RISK PHRASES	CAS N.	EINECS N.
None	N/A	N/A	N/A	N/A	N/A

3.2 Other non-hazardous ingredients

Calcium Sulphate(CaSO<sub>4</sub>), Quartz and Cristobalite.

**SECTION 4****First aid measures**

- 4.1 Treatment for eye contact: Wash eyes immediately with large amounts of water, lifting lower and upper lids occasionally.
- 4.2 Treatment for skin contact: Wash with soap and water. Use hand lotion
- 4.3 Treatment for inhalation (breathing): Move exposed person to fresh air at once.
- 4.4 Treatment for ingestion (swallowing): Consult a physician.

**SECTION 5****Fire-fighting Measures**

- 5.1 Suitable extinguishing media: Not applicable.
- 5.2 Forbidden extinguishing media: Not applicable.
- 5.3 Special fire fighting measures: Not applicable.
- 5.4 Unusual fire and explosion hazards: Not applicable.
- 5.5 Special protection equipment: Not applicable.

**SECTION 6****Accidental Release Measures**

- 6.1 Personal Precautions: Adopt same precautions listed in section 8.
- 6.2 Environmental Precautions: Avoid dust formation.
- 6.3 Reclaiming Methods: Ventilate area of spill or release. Sweep up. Avoid unnecessary stirring in order to prevent formation of dust.

**SECTION 7****Handling and Storage** (according to article 5 of communitarian directive 98/24/EC)

- 7.1 Handling Precautions: Do not breathe dust. Keep container closed.
- 7.2 Precautions in case of Fire and Explosion: Unlikely to occur. This product is not flammable.
- 7.3 Storage Conditions: Store in a cool, dry place. High humidity level causes product hardening.
- 7.4 Suggested container(s): Original sealed containers provided by manufacturer.
- 7.5 Indication for Combined Storage: Avoid contact with hydrofluoric acid, in which silica will dissolve and produce the corrosive gas silicon tetrafluoride.
- 7.6 Environmental precautions: Not available.
- 7.7 Other Precautions: Not available.

<b>SECTION 8</b>	
<b>Exposure controls/personal protection</b>	
8.1 Exposure Limits:	<u>TWA/TLV</u> (for Cristobalite and Quartz): 0,01 ppm (0,025 mg/m <sup>3</sup> ) (for Calcium Sulphate): 1,8 ppm (10 mg/m <sup>3</sup> )
8.2 Exposure control measures	
8.2.1 Precautionary Measures: (according to communitarian directives 89/686/EEC & article 4 of 98/24/EC)	
Ventilation:	<u>Local Exhaust Ventilation</u> : Use sufficient local exhaust to reduce the level of inhalable crystalline silica to the TLV. <u>Special Ventilation</u> : None. <u>Mechanical (General) Ventilation</u> : May be sufficient. <u>Other Ventilation</u> : None.
Respiratory Protection:	When dusty conditions exist, wear an approved dust mask.
Hands Protection:	Gloves optional
Eyes Protection:	Eye goggles
Skin Protection:	Handle in accordance with good personal hygiene and safety practices. Avoid unnecessary exposure.
Other Protective Equipments:	Use of lab coat is encouraged.
<i>Measures listed in this paragraph are to be considered as indications and NOT prescriptions (89/656/EEC)</i>	
8.2.2 Environment exposure control measures Not Applicable.	

<b>SECTION 9</b>	
<b>Physical and Chemical Properties</b>	
9.1 General information	
<u>Appearance</u> : Off-white powder	<u>Odour</u> : Odourless
9.2 Information related to health, safety and environment	
<u>pH</u> : Not applicable (N/A)	<u>Relative density</u> : Not applicable
<u>Boiling point</u> : Not applicable	<u>Specific gravity</u> : 2,4 g/ml
<u>Flash point</u> : Not applicable	<u>Solubility</u> : Slightly soluble in water
<u>Flammability</u> : Not flammable.	<u>Partition coefficient n-octanol/water</u> : Not applicable
<u>Lower Explosivity Limit (L.E.L.)</u> : N/A	<u>Viscosity</u> : Not applicable
<u>Upper Explosivity Limit (U.E.L.)</u> : N/A	<u>Vapour density (air = 1)</u> : Not applicable
<u>Oxidizing properties</u> : Unknown	<u>Evaporation rate (n-butane = 1)</u> : Not applicable
<u>Vapour pressure</u> : Not applicable	<u>Melting point</u> : Not applicable
9.3 Other information (according to communitarian directive 94/9/EC):	
<u>Miscibility</u> : Not available.	<u>Conducibility</u> : Not available
<u>Solubility in Lipids</u> : Unknown	<u>Gases Group</u> : Not applicable

**SECTION 10****Stability and Reactivity**

Stability: Stable.

10.1 Conditions to avoid: None.

10.2 Materials to avoid (incompatibility): Hydrofluoric acid, in which silica will dissolve and produce the corrosive gas silicon tetra-fluoride.

10.3 Hazardous decomposition products: Not available.

Other precautions:

Hazardous Polymerization Products: Will not occur.

Safety significance in case of change in physical appearance: Moisture and water will cause the product to harden and therefore be unusable.

Stabilizers: Product is not stabilized.

**SECTION 11****Toxicological Information**CMR effects (Carcinogenicity, Mutagenicity and toxicity for reproduction):

Possible. See comments under "Effects for prolonged exposure".

Effects and hazards of eye contact: May cause irritation.

Effects and hazards of skin contact: May cause dry feeling on skin.

Effects and hazards of Inhalation (Breathing): Prolonged exposure to inhalable crystalline silica may cause chronic lung injury (silicosis). Acute developing silicosis may occur in a short time in heavy exposure. Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death. The International Agency for Research on Cancer (IARC) reports sufficient evidence of the carcinogenicity of crystalline silica to humans (IARC group 1). Kerr Corporation accepts no responsibility and disclaims all liability for harmful health effects and customers must comply with all applicable health and safety regulations relating to the safe handling of our silica-containing products.

Effects and hazards of Ingestion (Swallowing): Hardens when wetted and, if ingested, may result in an obstruction.

Effects for prolonged Exposure: Silicosis – see "effects for inhalation".

Toxic-kinetic effects: Not available.

Effects on metabolism: Not available.

Toxicological data for ingredients:

<b>Cristobalite</b>	LD <sub>Lo</sub> (Intratracheal rat):	200 mg/Kg
	TC <sub>Lo</sub> (Inhalation mouse):	43 mg/m <sup>3</sup> (from 5 hours to 19 days)
<b>Calcium Sulphate</b>	LD <sub>50</sub> (Oral rat):	> 5000 mg/Kg

**SECTION 12****Ecological Information**

This product has not known ecological hazardous effects.

12.1 Eco-toxicity: Not applicable

12.2 Mobility: Not available

12.3 Persistence and degradability: Not available

12.4 Bioaccumulative potential: Not available

12.5 Results of PBT (Persistent Bio-Toxicity) assessment: Not available

12.6 Other adverse effects: Not available

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Aquatic toxicity data for ingredients:

None

**SECTION 13****Disposal considerations**

Dispose of in accordance of local regulations.

**SECTION 14****Transport information**

14.1 Sea transportation (IMDG)

The product is not regulated.

14.2 Air transportation (ICAO/IATA)

The product is not regulated.

14.3 Transportation by Road/Railway (RID/ADR)

The product is not regulated.

**SECTION 15** (Classification according to communitarian directives 67/548/EEC & 99/45/EC)**Regulatory information**

Risk phrases:

None

Safety phrases:

22 Do not breathe dust.

51 Use only in well-ventilated areas.

63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

**SECTION 16****Other information**16.1 Risk phrases of all ingredients

None

16.2 Sources of key data used to compile the Safety Data Sheet:European Chemicals Bureau (ECB – [www.ecb.jrc.it](http://www.ecb.jrc.it))European chemical Substances Information System (ESIS - [www.ecb.jrc.it/esis](http://www.ecb.jrc.it/esis))A.C.G.I.H. ([www.acgih.org](http://www.acgih.org))N.I.O.S.H. ([www.cdc.gov/niosh/](http://www.cdc.gov/niosh/))O.S.H.A. ([www.osha.gov/](http://www.osha.gov/))U.E. ([www.europa.eu/index\\_it.htm](http://www.europa.eu/index_it.htm))I.A.R.C. ([www.iarc.fr/](http://www.iarc.fr/))N.T.P. ([www.ntp.niehs.nih.gov](http://www.ntp.niehs.nih.gov))European Community Directives:

67/548/EEC:	Classification, packaging and labelling of dangerous substances.
99/45/EC:	Directive concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.
2001/58/EC:	Second amendment of directive 91/155/EEC for the definition of a detailed arrangement of specific information relating to dangerous preparations (art. 14 of 99/45/EC) and substances (art. 27 of 67/548/EEC).
89/656/EEC:	Directive on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace (third individual directive within the meaning of Article 16 (1) of Directive 89/391/EEC).
89/686/EEC:	Approximation of the laws of the Member States relating to personal protective equipment.
94/9/EC:	Approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres
98/24/EC:	Protection of the health and safety of workers from the risks related to chemical agents at work.

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**CAUTION: PRODUCT FOR PROFESSIONAL USE**

The information on this Safety Sheet is based on presently available data and to our best knowledge for the correct handling of the product under normal conditions. Any use of this product in any way not indicated on this Sheet or the use of this product together with any other process/procedure will be exclusively under the user's responsibility. This document does not constitute explicit or implicit warranty of product quality or fitness for a particular purpose.