

W. R. GRACE
MATERIAL SAFETY DATA SHEET

Product Name FlameSafe FS 4000 Sealant Caulk Grade, FlameSafe FS 4000 Sealant Self Leveling
MSDS ID Number: Z-01680 MSDS Date: 03/05/2007

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: FlameSafe FS 4000 Sealant Caulk Grade, FlameSafe FS 4000 Sealant Self Leveling
MSDS Number: Z-01680
Cancelled MSDS Number: New
MSDS Date: 03/05/2007
Chemical Family Name: Mixture of components listed in MSDS section 2
Product Use: Fire Retardant Caulking
Chemical Formula: Mixture-NA
CAS # (Chemical Abstracts Service Number): Mixture-NA

Manufactured by:

W.R.Grace & Co.-Conn. 62 Whittemore Avenue Cambridge, MA 02140	Grace Canada, Inc. 294 Clements Road West Ajax, Ontario L1S 3C6
--	---

In Case of Emergency Call:

In USA: (617) 876-1400 In Canada: (905) 683-8561

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS#	Percent (max)
2-Butanone, O,O',O''-(methylsilyldiyl)trioxime	022984-54-9	1-10
Calcium carbonate	001317-65-3	25-50
Dibutyltin dilaurate	000077-58-7	< 1
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine	001760-24-3	1-10
Silica, amorphous	007631-86-9	1-10
Siloxanes and Silicones, di-Me	063148-62-9	25-50
Siloxanes and Silicones, di-Me, hydroxy-terminated	070131-67-8	25-50

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:

Caution!

Causes eye irritation.
Causes skin irritation.
Causes respiratory tract irritation.
May be harmful if ingested.

HMIS Rating:

Health:	2*
Flammability:	1
Reactivity:	0
Personal Protective Equipment:	See section 8

Potential Health Effects:

Inhalation: Causes respiratory tract irritation. Vapor exposure may cause drowsiness. Inhalation may result in effects similar to those under ingestion.

Eye Contact: Eye contact causes irritation.

Skin Contact: Skin contact causes irritation.

May cause sensitization.

Skin Absorption: Not expected to be harmful if absorbed through the skin.

Ingestion: Harmful if ingested.

If ingested may cause blood effects and liver damage.

Other: Product Forms Methyl ethyl ketoxime (CAS# 96-29-7) upon contact with atmospheric moisture. Exposure to Methyl ethyl ketoxime vapor may cause skin and eye irritation, drowsiness, blood effects, liver effects and may cause irritation and harm to the nose, throat and lungs.

W. R. GRACE

MATERIAL SAFETY DATA SHEET

Product Name FlameSafe FS 4000 Sealant Caulk Grade, FlameSafe FS 4000 Sealant Self Leveling
MSDS ID Number: Z-01680
MSDS Date: 03/05/2007

SECTION 4 - FIRST AID MEASURES:

Skin Contact: Wash with soap and water.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

Eye Contact: Flush eyes with water for at least 15 minutes while holding eyelids open.

If discomfort or irritation persists, consult a physician.

Ingestion: Do not induce vomiting.

Never give anything by mouth to an unconscious person.

If discomfort or irritation persists, consult a physician.

Inhalation: If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give artificial respiration then oxygen if needed.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

Flash Point: >212F (100C)

Flash Point Method: Closed cup

Lower Explosion Limit: Not Available

Upper Explosion Limit: Not Available

Auto-ignition Temperature: Not Available

NFPA Rating:

Health: 1

Flammability: 1

Reactivity: 0

Extinguishing Media: Not Applicable. Product will not burn.

Special Fire Fighting Procedures: None

No special procedures specific to this product.

Unusual Fire and Explosion Hazards: Avoid direct sources of heat or ignition in uncured state.

SECTION 6 - ACCIDENTAL RELEASE MEASURES:

Spills/Leaks: Use proper personal protective equipment. Do not flush to sewer or allow to enter waterways. Keep unnecessary people away.

If spilled, prevent material from entering water systems. Observing the listed Precautionary Measures found in Section 7 of this document.

SECTION 7 - HANDLING AND STORAGE

Precautionary Measures: Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

Provide respiratory protection if needed.

Wear skin and eye protection to avoid contact with dust or spray.

Avoid direct sources of heat or ignition in uncured state.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

W. R. GRACE**MATERIAL SAFETY DATA SHEET**

Product Name FlameSafe FS 4000 Sealant Caulk Grade, FlameSafe FS 4000 Sealant Self Leveling MSDS ID
 Number: Z-01680 MSDS Date: 03/05/2007

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	Substance Specific and Mineral Dust PELs
2-Butanone, O,O',O"- (methylsilylydyne)trioxime	-	-	-	-	-	-	-
Calcium carbonate	-	-	-	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	-	-	-
N-[3-(Trimethoxysilyl)propyl]- 1,2-ethanediamine	-	-	-	-	-	-	-
Silica, amorphous	-	-	-	-	-	-	20 mppcf TWA; ((80))/(% SiO2) mg/m3 TWA)
Siloxanes and Silicones, di-Me	-	-	-	-	-	-	-
Siloxanes and Silicones, di-Me, hydroxy-terminated	-	-	-	-	-	-	-

Forms Methyl ethyl ketoxime (CAS# 96-29-7) upon contact with atmospheric moisture. Provide adequate ventilation to control exposure within appropriate exposure limits (ACGIH 10 ppm TWA). Contains Amorphous silica and Calcium carbonate. Due to the physical nature of this product (liquid) exposures are not expected unless after product dries it is abraded and airborne dust is created.

EXPOSURE GUIDELINES (CANADA)

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

Engineering Controls: Exhaust fans may be necessary when mixing in enclosed areas.

Personal Protective Equipment:

Respiratory Protection: Respiratory protection is not normally required under normal use. If exposure limits above are exceeded or respiratory irritation develops wear an approved NIOSH/MSHA approved organic vapor respirator. Respiratory protection is also recommended in confined spaces or areas where ventilation is poor.

Skin Protection: Work gloves or hand creams are recommended to prevent drying of skin.

Eye Protection: At minimum, safety glasses with side shields should be worn where exposure to excessive dust or spray is likely.

Work/Hygiene Practices: Use good personal hygiene practices.

Forms Methyl ethyl ketoxime (CAS# 96-29-7) upon contact with atmospheric moisture. Exposure to Methyl ethyl ketoxime vapor may cause skin and eye irritation, drowsiness, blood effects, liver effects and may cause irritation and harm to the nose, throat and lungs.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Paste
Appearance/Odor:	Low Odor, smooth self-leveling sealant/thixotropic sealant
Odor Threshold: (ppm)	Not Determined
pH:	Not Available
Vapor Pressure: (Mm Hg)	<.5mm
Vapor Density: (Air = 1)	Greater than 1
Solubility In Water:	Unknown
Specific Gravity: (Water = 1)	Not Available
Evaporation Rate: (Butyl Acetate = 1)	Not Available
Boiling Point:	>212°F/100°C
Viscosity:	Unknown
Bulk Density: (Pounds/Cubic Foot)(Pcf)	Not Applicable
% Volatiles (gr/L): (70°F) (21°C)	Not Applicable

W. R. GRACE**MATERIAL SAFETY DATA SHEET**

Product Name FlameSafe FS 4000 Sealant Caulk Grade, FlameSafe FS 4000 Sealant Self Leveling MSDS ID
 Number: Z-01680 MSDS Date: 03/05/2007

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions To Avoid: Strong oxidizers, Strong acids, Ammonium salts, flourine, maganese trioxide, oxygen diflouride, chlorine trifluoride and Strong oxidizers and electrophiles (e.g. Ferric chloride). Concentrated acids or bases can degrade the silicone polymer.
Hazardous Polymerization: Will not polymerize.
Hazardous Decomposition Products: Carbon dioxide, Oxides of nitrogen, hydrocarbons, magnesium carbonate, lime, silicone dioxide and calcium oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

Ingredient(No data unless listed.) **CAS Number** **LD50 and LC50**

Carcinogenicity:

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
2-Butanone, O,O',O''-(methylsilylidyne)trioxime	No	No	No	No	No	No
Calcium carbonate	No	No	No	No	No	No
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine	No	No	No	No	No	No
Silica, amorphous	No	No	No	No	No	No
Siloxanes and Silicones, di-Me	No	No	No	No	No	No
Siloxanes and Silicones, di-Me, hydroxy-terminated	No	No	No	No	No	No

Mutagenicity: Not applicable.
Teratogenicity: Not applicable.
Reproductive Toxicity: Not applicable.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate: No data available for product.
Ecotoxicity: No data available for product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Procedures: Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: Not Applicable
UN/NA Number: Not Applicable
Domestic Hazard Class: Nonhazardous
Surface Freight Classification: Not Applicable
Label/Placard Required: Not Applicable

SECTION 15 - REGULATORY INFORMATION**REGULATORY CHEMICAL LISTS:**

CERCLA (Comprehensive Response Compensation and Liability Act):
 (None present unless listed below)

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>CERCLA RQ</u>
----------------------	--------------	-------------	------------------

SARA Title III (Superfund Amendments and Reauthorization Act)**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

