GE Silicones

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FORMAT: USA
PRODUCT: SS4179

MATERIAL SAFETY DATA SHEET
SILICONE PRIMER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED BY:
GE SILICONES
260 HUDSON RIVER ROAD
WATERFORD, NY 12188

EMERGENCY PHONE (24 HRS)
(518) 237-3330

SUPPLIED BY:
GE SILICONES
260 HUDSON RIVER ROAD
WATERFORD, NY 12188

EMERGENCY PHONE (24 HRS)
(518) 237-3330

REVISED: 08/30/02
PREPARER: CE HANNIGAN
CHEMICAL FAMILY/USE: SILICONE SOLUTION
FORMULA: MIXTURE

2. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION/ CAS REG NO.	APPROX. WGT. %	ACGIH TLV TWA	ACGIH TLV STEL	OSHA PEL TWA	OSHA PEL STEL	UNITS
1. HAZARDOUS						
BENZENE						
71-43-2	<1PPB	0.5	2.5	1	5	PPM
METHANOL						
67-56-1	1-5	200 SKN	250	200 SKN	250	PPM
TOLUENE						
108-88-3	<1PPM	50 (SKIN)		100	150	PPM
ETHYL ACETATE						
141-78-6	80-99	400	NE	400	NE	PPM
2-PROPENOIC ACID, 2-METHYL-,METHYL-ESTER, POLYMER W/ 3-(TRIMETHOXYSILYL) PROPYL 2-METHYL, 2-PROPENOATE						
26936-30-1	5-10	NA	NE	NA	NE	NA
2. NON-HAZARDOUS						
None Found						

See Section 15 for description of any WHMIS Trade Secret(s).

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3. HAZARDS IDENTIFICATION

1□ EMERGENCY OVERVIEW:
WARNING!
Irritating to skin, eyes, and respiratory tract.
Harmful if swallowed, inhaled, or absorbed through skin.
May cause adverse liver, kidney, and CNS effects.
Flammable liquid and vapor.
May harm vision.
May cause allergic skin reaction.
May generate formaldehyde at temperatures greater than 150 C (300 F). See Section 3 of MSDS for details.
Ester odor
Clear liquid
POTENTIAL HEALTH EFFECTS:
INGESTION:
Harmful if swallowed.
Causes vomiting, nausea, and diarrhea.
Coma, shock and death may occur.
Irritation of the mouth, throat, and stomach.
May be fatal or cause blindness if swallowed.
Large intake can result in narcosis.
SKIN CONTACT:
Causes moderate skin irritation.
Causes drying of the skin.
May cause an allergic skin reaction.
May cause a rash and itching of the skin.
May be absorbed through the skin and contribute to the symptoms listed under "Ingestion".
Vapor and/or liquid causes irritation.
INHALATION:
Excessive inhalation causes headache, dizziness, nausea and incoordination.
Causes moderate respiratory irritation.
Causes irritation of the mouth, nose, and throat.
Harmful if inhaled.
Can cause unconsciousness if inhaled.
Causes depression and fatigue.
May cause systematic poisoning.
EYE CONTACT:
Causes severe eye irritation.
High vapor concentration will cause irritation.
May harm vision.
Vapor and/or liquid causes irritation.
May cause mild eye irritation.
May cause severe eye irritation.
MEDICAL CONDITIONS AGGRAVATED:
Respiratory disorders.
Pulmonary disorders.
Central nervous system disorders.
Gastrointestinal disorders.
Blood disorders.
Eye disorders.
Pre-existing liver or kidney disorders.

Skin disorders.
SUBCHRONIC (TARGET ORGAN) EFFECTS:
Dermatitis.
Respiratory ailments.
Central nervous system damage.
Optic nerve damage.
Liver and kidney damage.
Corneal damage.
Blood disorders.
Pulmonary edema.
Cumulative systemic toxicity.
Eye damage.
Anemia
Permanent brain damage.
CHRONIC EFFECTS/CARCINOGENICITY:
This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.
PRODUCTS/INGREDIENTS
This space reserved for special use.
PRINCIPLE ROUTES OF EXPOSURE:
Oral.
Dermal - skin.
Eyes.
Inhalation.
Absorption through skin.
OTHER:
This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150'C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. An MSDS for formaldehyde is available from GE Silicones.

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4. FIRST AID MEASURES

INGESTION:
Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
SKIN:
In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.
INHALATION:
If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.
EYES:
In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
NOTE TO PHYSICIAN:
None known.

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5. FIRE FIGHTING MEASURES

FLASH POINT: -2.8 (C) 27 (F)
METHOD : TCC.
IGNITION TEMP : 385 (C) 725 (F)
FLAMMABLE LIMITS IN AIR - LOWER (%): 2
FLAMMABLE LIMITS IN AIR - UPPER (%): 11
SENSITIVITY TO MECHANICAL IMPACT (Y/N): NO
SENSITIVITY TO STATIC DISCHARGE:
Sensitivity to static discharge is expected; material has a flash point below 200 F.
EXTINGUISHING MEDIA:
Alcohol foam
Carbon dioxide
Dry chemical
Foam
SPECIAL FIREFIGHTING PROCEDURES:
Flammable.
Positive pressure, self-contained breathing apparatus
Wear full protective clothing.

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6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Wipe, scrape or soak up in an inert material and put in a container for disposal.
Wear proper protective equipment as specified in the protective equipment section.
Remove sources of ignition.
Warn other workers of spill.
Increase area ventilation.
Person not trained should evacuate area.

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7. HANDLING AND STORAGE

1□ PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Use ground strap and appropriate precautions for dispensing flammable liquids.
Recommended storage in original container below 30'C (85'F).
Keep container closed when not in use.
Avoid breathing vapors.

Avoid contact with skin and eyes.
Use only in a well ventilated area.
Warning. Flammable.
Do not inhale vapors.
Keep away from food and smoking materials.
Wash hands before eating and smoking.
Caution!
Emptied containers may retain hazardous properties. Do not cut, puncture or weld on or near the container.
Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded with material.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:
Exhaust ventilation
Showers.
Eyewash stations.
Use in a well ventilated area.
RESPIRATORY PROTECTION:
Use in a well ventilated area.
Use approved NIOSH respiratory protection if TLV exceeded or overexposure is likely.
PROTECTIVE GLOVES:
Rubber gloves.
EYE AND FACE PROTECTION:
Safety glasses.
Monogoggles.
Face shield.
OTHER PROTECTIVE EQUIPMENT:
Rubber apron.
Wear eye protection and protective clothing.
VENTILATION:
Use only in well ventilated area.
Mechanical ventilation.

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9. PHYSICAL AND CHEMICAL PROPERTIES

1
BENZENE

BOILING POINT	:	80.1	(C)	176	(F)
VAPOR PRESSURE(20 C)(MM HG)	:	75			
VAPOR DENSITY (AIR=1)	:	2.8			

METHANOL

BOILING POINT	:	64.7	(C)	148.5	(F)

VAPOR PRESSURE(20 C)(MM HG): 96
VAPOR DENSITY (AIR=1) : 1.1

TOLUENE
BOILING POINT : 110 (C) 231 (F)
VAPOR PRESSURE(20 C)(MM HG): 22
VAPOR DENSITY (AIR=1) : 3.2

ETHYL ACETATE
BOILING POINT : 77 (C) 171 (F)
VAPOR PRESSURE(20 C)(MM HG): 73
VAPOR DENSITY (AIR=1) : 3.0

2-PROPENOIC ACID, 2-METHYL-,METHYL-
BOILING POINT : NA (C) NA (F)
VAPOR PRESSURE(20 C)(MM HG): NA
VAPOR DENSITY (AIR=1) : NA

PRODUCT INFORMATION:
BOILING POINT : NA (C) NA (F)
VAPOR PRESSURE(20 C)(MM HG): NA
VAPOR DENSITY (AIR=1) : NA
FREEZING POINT : <0 (C) <32 (F)
MELTING POINT : UNK (C) UNK (F)
PHYSICAL STATE : LIQUID
ODOR : ESTER
COLOR : CLEAR
ODOR THRESHOLD (PPM) : 3.9
% VOLATILE BY VOLUME : ~94
EVAP. RATE(BUTYL ACETATE=1): 6
SPECIFIC GRAVITY (WATER=1) : .91
DENSITY (KG/M3) : 910.7
ACID/ALKALINITY (MEQ/G) : UNK
PH : UNK
VOC EXCL.H2O & EXEMPTS(G/L): 840
SOLUBILITY IN WATER (20 C) : INSOLUBLE
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): SOLUBLE IN ALCOHOLS

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10. STABILITY AND REACTIVITY

1□ STABILITY: STABLE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:
Methanol.
Ethyl acetate.
Formaldehyde.
INCOMPATIBILITY (MATERIALS TO AVOID):
Contact with oxidizing agents.
CONDITIONS TO AVOID:
Keep away from heat, sparks and flame.
Avoid any source of ignition.

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11. TOXICOLOGICAL INFORMATION

BENZENE
ACUTE ORAL LD50 (MG/KG): 3,800 (RAT)
ACUTE DERMAL LD50 (MG/KG): NONE FOUND
ACUTE INHALATION LC50 (MG/L): 10,000 PPM/7HR(RAT)
OTHER:
Tested for acute oral LD50 and LC50.
AMES TEST: UNKNOWN

METHANOL
ACUTE ORAL LD50 (MG/KG): 5628MG/KG(RAT)
ACUTE DERMAL LD50 (MG/KG): 15,800 (rbt)
ACUTE INHALATION LC50 (MG/L): 64,000PPM/4HR
OTHER:
Tested for acute oral LD50.
AMES TEST:

TOLUENE
ACUTE ORAL LD50 (MG/KG): 5000 (RAT)
ACUTE DERMAL LD50 (MG/KG): 14,000 (RBT)
ACUTE INHALATION LC50 (MG/L): 5320 PPM /8HR(MUS)
OTHER:
Tested for acute oral, dermal and inhalation.
AMES TEST: UNKNOWN

ETHYL ACETATE
ACUTE ORAL LD50 (MG/KG): 11,300 (RAT)
ACUTE DERMAL LD50 (MG/KG): NONE FOUND
ACUTE INHALATION LC50 (MG/L): 1600 PPM/8HR(RAT)
OTHER:
None.

AMES TEST:
1
2-PROPENOIC ACID, 2-METHYL-,METHYL-
ACUTE ORAL LD50 (MG/KG): NA
ACUTE DERMAL LD50 (MG/KG): NA
ACUTE INHALATION LC50 (MG/L): NA
OTHER:
None.

AMES TEST:

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data at this time
CHEMICAL FATE INFORMATION: No data at this time

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13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:
Disposal should be made in accordance with federal, state and local regulations.
Incineration recommended in approved incinerator according to federal, state, and local regulations.

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14. TRANSPORT INFORMATION

DOT SHIPPING NAME: FLAMMABLE LIQUID N.O.S. (ETHYL ACETATE & METHANOL)
DOT HAZARD CLASS: 3
DOT LABEL(S): FLAMMABLE LIQUID
UN/NA NUMBER: UN1993
PLACARDS: FLAMMABLE LIQUID
IATA:
FLAMMABLE LIQUID N.O.S. (ETHYL ACETATE & METHANOL), 3, UN1993, II
IMO IMDG-code: 3
EMS No: EmS. No.3-07
EUROPEAN CLASS:
RID (OCTI): 3
ADR (ECE) : 3,2301,1A
RAR (IATA): 3

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15. REGULATORY INFORMATION

1
SARA SECTION 302:
None Found
SARA (311,312) HAZARD CLASS:
ACUTE HEALTH HAZARD
CHRONIC HEALTH HAZARD
FIRE HAZARD
SARA (313) CHEMICALS:
THIS PRODUCT CONTAINS TOXIC CHEMICAL(S) LISTED BELOW WHICH IS(ARE) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

METHANOL

67-56-1
CPSC CLASSIFICATION: NA
WHMIS HAZARD CLASS:
B2 FLAMMABLE LIQUIDS
D2B TOXIC MATERIALS
WHMIS TRADE SECRET:
None
EXPORT:
SCHDLE B/HTSUS: 3208.90 Polymer Solution
ECCN: EAR99
HAZARD RATING SYSTEMS
HMIS FLAMMABILITY 3 , REACTIVITY 1 , HEALTH 3
NFPA HEALTH = 3, FLAMMABILITY = 3, REACTIVITY = 1
CALIFORNIA PROPOSITION 65:
THIS PRODUCT CONTAINS CALIFORNIA PROPOSITION 65 CHEMICALS
WHICH ARE LISTED BELOW:

BENZENE (71-43-2)
TOLUENE (108-88-3)

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16. OTHER INFORMATION

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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This product or its components are on the Australian inventory (ACOIN).....

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C =	ceiling limit	NEGL =	negligible
EST=	estimated	NF =	none found
NA =	not applicable	UNKN =	unknown
NE =	none established	REC =	recommended
ND =	none determined	V =	recomm. By vendor
By-product = reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2)		SKN =	skin
		TS =	trade secret
		R =	recommended
		MST =	mist
STEL = short term exposure limit		NT =	not tested

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California Proposition 65:
WARNING! This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Additional technical guidance for NYS bulk storage

- Some NYS bulk storage requirements are covered in previous

sections.

- This product contains flammable/combustible solvents.

- Materials of construction/compatibility
Material is commonly stored in closed stainless steel or glass lined steel piping and storage tanks (at ambient temperature). Any other materials such as reinforce fiber-glass, plastic and etc. must be tested for compatibility be-fore use. Consult supplier for materials for gaskets, packing, etc.

- Condition for safe storage
Bulk storage design factors to consider are venting, diking, separation distances between tanks and other structures. Storage requirements should be determined through consultation with qualified design and fire protection engineers and fire insurance carriers.
Technical guidance may be found in pamphlet NFPA 30 or factory mutual handbook of industrial loss prevention.
Recommended tank design: For pressure vessels, see American Society of Mechanical Engineers (ASME) code, section VIII, 50 PSIG minimum pressure and full vacuum. For atmospheric tanks, see API 2000 for design requirements.
Relief Valves: Flammable and Combustible Liquids code, NFPA Nos. 30 and 29 CFR 1910.106, also consult API 520, 521. For piping design, consult ANSI B.31.3.

- Storage equipment
Corrosion protection, leak detection, spill and over-fill protection requirements, installation and maintenance information may be found in EPA final rule: 40 CFR part 280 underground storage tanks. New York State regulates storage requirements of this material in 6NYCRR parts 595-599.

- Inspection and maintenance

NYS regulates some inspection and maintenance requirements under 6NYCRR part 598.

API publication, guide for inspection of refinery equipment, is a source for inspection and maintenance information. (American Petroleum Institute, 1220 L. Street, Northwest, Washington, D.C. 20005)

- Safety precautions, warnings and procedures for handling and unloading bulk deliveries
Only qualified, fully trained and experienced persons should sample, connect, load, unload, or disconect a tank car, portable tank or tank truck.
When loading or unloading material in bulk, all DOT (Department of Transportation) regulations found in 49 CFR 172-178 must be followed when applicable. This will include grounding, braking, attendance, etc.
The contents of the material to be unloaded should be verified before any transfer is made.
Prior to unloading into a storage tank, a qualified person must check the storage tank level to be sure that the amount of material to be received will not overflow the

storage tank. The proper unloading connection should be vented to a vapor removal, recovery or conservation system.

- Spill and emergency response
Release reporting and corrective action are listed in 40 CFR part 280 underground storage tanks and 6NYCRR part 595.

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All materials in this product are either listed on the TSCA inventory or are exempted from notification requirements.

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DATE PRINTED: 10/01/02