

PRODUCT: SF1328

SILICONE SURFACTANT

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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

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

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

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REVISED: 11/16/99
 PREPARER: JL MCGUFFEY
 CHEMICAL FAMILY/USE: SILICONE SILOXANE BLEND
 FORMULA: MIXTURE

2. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION/ CAS REG NO.	APPROX. WGT. %	ACGIH TLV		OSHA PEL		UNITS
		TWA	STEL	TWA	STEL	
A. HAZARDOUS						
DECAMETHYLCYCLOPENTASILOXANE 541-02-6	10-30	10 PPM	NE	GE REC	GUIDE	LINE
OCTAMETHYLCYCLOTETRAASILOXANE 556-67-2	60-80	5 PPM	NE	GE REC	NE	GUIDE
B. NON-HAZARDOUS						
SILOXANES & SILICONES, DIMETHYL- METHYL 3-HYDROXYPROPYL ETHOXYLATED- PROPOXYLATED 68937-55-3	5-10	NE	NA	NE	NA	NA

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

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Cream-White Liquid
 Slight Pungent Odor
 Warning! Flammable
 Keep away from heat, sparks, and flame.
 Refer to other MSDS sections for detailed information.

POTENTIAL HEALTH EFFECTS:

INGESTION:

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MARKETED BY
HARWICK STANDARD
DISTRIBUTION CORPORATION
 60 S. Seiberling Street • Akron, Ohio 44305

MARKETED BY

**HARWICK STANDARD
DISTRIBUTION CORPORATION**

60 S. Seiberling Street - Akron, Ohio 44305

May be harmful if swallowed.

SKIN CONTACT:

None known.

INHALATION:

None Known.

EYE CONTACT:

May cause mild eye irritation.

MEDICAL CONDITIONS AGGRAVATED:

None known.

SUBCHRONIC (TARGET ORGAN) EFFECTS:

Reproductive disorders.

May cause liver effects.

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:

None known.

OTHER:**Octamethylcyclotetrasiloxane**

Ingestion: Rodents given large doses via oral gavage of octamethylcyclotetrasiloxane (1600 mg/kg day, 14 days) developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appeared normal) as well as hypertrophy (increased cell size).

Inhalation: In inhalation studies, laboratory rodents exposed to octamethylcyclotetrasiloxane (300 ppm five days week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents.

Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation) with octamethylcyclotetrasiloxane (D4). Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4

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related clinical signs were observed in the pups and no exposure related pathological findings were found.

Interim results from a two generation reproductive study in rats exposed to 500 and 700 ppm D4 (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation) resulted in a statically significant decrease in live mean litter size as well as extended periods of offspring delivery (dystocia). These results were not observed at the 70 and 300 ppm dosing levels.

The relevance of these data to humans is unclear. Further studies are ongoing.

In developmental toxicity studies, rats and rabbits were exposed to octamethylcyclotetrasiloxane at concentrations up to 700 ppm and 500 ppm respectively. No teratogenic effects (birth defects) were observed in either study.

Decamethylcyclopentasiloxane

Ingestion: Rodents given doses via oral gavage of decamethylpentasiloxane (100 mg/kg/day for females, 400 mg/kg/day for males, 14 days) developed increased liver weights relative to unexposed control animals.

Inhalation: In inhalation studies, laboratory rodents exposed to decamethylpentasiloxane (120 ppm five days/week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents.

Attention: Not for injection into humans.

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.

4. FIRST AID MEASURES

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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:

Wash with soap and water.

INHALATION:

None known.

EYES:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

NOTE TO PHYSICIAN:

None known.

5. FIRE FIGHTING MEASURES

FLASH POINT:	54	(C) 130	(F)
METHOD :	FMCC.		
IGNITION TEMP :	UNKN	(C) UNKN	(F)
FLAMMABLE LIMITS IN AIR - LOWER (%):	UNKN		
FLAMMABLE LIMITS IN AIR - UPPER (%):	UNKN		
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:

All standard firefighting media

SPECIAL FIREFIGHTING PROCEDURES:

Flammable.

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.

Wash walking surfaces with detergent and water to reduce slipping hazard.

Remove sources of ignition.

7. HANDLING AND STORAGE

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Recommended storage in original container below 30'C (85'F).

Keep container closed when not in use.

Warning. Flammable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

None known.

RESPIRATORY PROTECTION:

None known.

PROTECTIVE GLOVES:

None known.

EYE AND FACE PROTECTION:

Safety glasses.

OTHER PROTECTIVE EQUIPMENT:

None known.

VENTILATION:

None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

DECAMETHYLCYCLOPENTASILOXANE

BOILING POINT :	210	(C)	410	(F)
VAPOR PRESSURE (20 C) (MM HG) :	0.3			
VAPOR DENSITY (AIR=1) :	NA			

OCTAMETHYLCYCLOTETRAASILOXANE

BOILING POINT :	175.8	(C)	348	(F)
VAPOR PRESSURE (20 C) (MM HG) :	1			
VAPOR DENSITY (AIR=1) :	NEG			

SILOXANES & SILICONES, DIMETHYL-

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 :	5	(C)	41	(F)
MELTING POINT :	UNKN	(C)	UNKN	(F)
PHYSICAL STATE :	LIQUID			

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ODOR : SLIGHT PUNGENT
COLOR : CREAM TO WHITE
ODOR THRESHOLD (PPM) : UNK
% VOLATILE BY VOLUME : 90
EVAP. RATE (BUTYL ACETATE=1) : <1
SPECIFIC GRAVITY (WATER=1) : UNKN
DENSITY (KG/M3) : UNKN
ACID/ALKALINITY (MEQ/G) : UNKN
PH : NA
VOC EXCL. H2O & EXEMPTS (G/L) : NF
SOLUBILITY IN WATER (20 C) : INSOLUBLE
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT) : ACETONE

10. STABILITY AND REACTIVITY

STABILITY: STABLE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:
Carbon monoxide.
Carbon dioxide.
Silicon dioxide.
Formaldehyde.
Aldehydes.
INCOMPATIBILITY (MATERIALS TO AVOID):
None known.
CONDITIONS TO AVOID:
Keep away from heat, sparks and flame.
Avoid any source of ignition.

11. TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION:
ACUTE ORAL LD50 (MG/KG) : >5,000 (RAT)
ACUTE DERMAL LD50 (MG/KG) : >16,000 MG/KG ESTM.
ACUTE INHALATION LC50 (MG/L) : >41 MG/L / 6 HR. EST
OTHER:
Non-irritating to skin (rbt). Non-irritating to eyes (zbt).
AMES TEST: UNKNOWN

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data at this time

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CHEMICAL FATE INFORMATION:

No data at this time

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.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: FLAMMABLE LIQUID N.O.S.
(Octamethylcyclotetrasiloxane)
DOT HAZARD CLASS: 3
DOT LABEL(S): FLAMMABLE LIQUID
UN/NA NUMBER: UN1993
PLACARDS: FLAMMABLE LIQUID
IATA:
FLAMMABLE LIQUID N.O.S. (Octamethylcyclotetrasiloxane), 3,
UN1993, III.
IMO IMDG-code: 3.3
IMDG PG. 3345
EMS No: EmS. No.3-07, Subsection 4.2 of MFAG
EUROPEAN CLASS:
RID (OCTI): 3
ADR (ECE): 3
RAR (IATA): 3

15. REGULATORY INFORMATION

SARA SECTION 302:
None Found
SARA (311,312) HAZARD CLASS:
CHRONIC HEALTH HAZARD
FIRE HAZARD
SARA (313) CHEMICALS:
NONE
CPSC CLASSIFICATION: NA
WEMIS HAZARD CLASS:
B3 COMBUSTIBLE LIQUIDS
D2A VERY TOXIC MATERIALS
WEMIS TRADE SECRET:
None

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EXPORT:

SCHEDULE B/HISUS: 3824.90 Chemical preparations N.E.S.

ECCN: EAR99

HAZARD RATING SYSTEMS

HMS FLAMMABILITY 2 , REACTIVITY 0 , HEALTH 0
 NFPA FLAMMABILITY 2 , REACTIVITY 0 , HEALTH 0

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS CALIFORNIA PROPOSITION 65 CHEMICALS WHICH ARE LISTED BELOW.

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

16. OTHER INFORMATION

This product or its components are on the European inventory of existing commercial chemicals (EINECS).....

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 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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 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- SKN = skin
 product, TSCA inventory TS = trade secret
 status not required under R = recommended
 40 CFR part 720.30(h-2) MST = mist
 STEL = short term exposure NT = not tested
 limit

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