



**Formasil\* 593 organomodified fluid**  
**Aminomodified Silicone Polyether Copolymer**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Manufactured By:** Momentive Performance Materials  
3500 South State Route 2  
FRIENDLY WV 26146

**Revised:** 11/09/2007  
**Preparer:** PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS  
**CHEMTREC** 1-800-424-9300

**Chemical Family/Use:** Aminomodified silicone-polyether copolymer  
**Formula:** Aminomodified silicone-polyether copolymer

**HMIS**

Flammability: 1      Reactivity: 0      Health: 1

**NFPA**

Flammability: 1      Reactivity: 0      Health: 1

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

Normal precautions common to safe manufacturing practice should be followed in handling and storage.

Form: Liquid      Color: Clear, pale      Odor: Amine-like

**POTENTIAL HEALTH EFFECTS**

**INGESTION**

No evidence of harmful effects from available information.

**SKIN**

Causes slight irritation. Causes the following effects: - slight local redness

**INHALATION**

Short-term harmful health effects are not expected from vapor generated at ambient temperature.

**EYES**

Causes mild irritation. Causes the following effects: - excess redness of the conjunctivae - swelling of the conjunctivae - tear production

**MEDICAL CONDITIONS AGGRAVATED**

Skin contact may aggravate: - an existing dermatitis

**SUBCHRONIC (TARGET ORGAN )**

None known.

**CHRONIC EFFECTS / CARCINOGENICITY**

For additional information, please see Section 11, Toxicological Information.



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**ROUTES OF EXPOSURE**

No anticipated routes of exposure.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>PRODUCT COMPOSITION</u>	<u>CAS REG NO.</u>	<u>WGT. %</u>
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**A. HAZARDOUS**

**B. NON-HAZARDOUS**

Aminomodified silicone-polyether copolymer	Trade secret	60 - 90 %
Polyalkylene Oxide	Trade secret	10 - 30 %

**4. FIRST AID MEASURES**

**INGESTION**

Do NOT induce vomiting. If victim is conscious, give 2-4 glasses of water. Never give anything by mouth to an unconscious person. Obtain medical attention.

**SKIN**

Wash off with soap and water. Get medical attention if symptoms occur.

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

**NOTE TO PHYSICIAN**

Treatment is symptomatic and supportive.

**5. FIRE-FIGHTING MEASURES**

<b>FLASH POINT:</b>	110 °C; 230 °F
<b>METHOD:</b>	ASTM D 93
<b>FLAMMABLE LIMITS IN AIR - LOWER (%):</b>	Not available
<b>FLAMMABLE LIMITS IN AIR - UPPER (%):</b>	Not available

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**SENSITIVITY TO MECHANICAL IMPACT:** No

**SENSITIVITY TO STATIC DISCHARGE**  
Sensitivity to static discharge is not expected.

**EXTINGUISHING MEDIA**  
All standard extinguishing agents are suitable.

**SPECIAL FIRE FIGHTING PROCEDURES**  
Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

## **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. Wear proper protective equipment as specified in the protective equipment section.

## **7. HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**  
Avoid contact with skin and eyes. Keep away from children. Attention: Not for injection into humans. May generate formaldehyde at temperatures greater than 150 C (300 F). See Section 10 of MSDS for details.

**STORAGE**  
Keep container closed. Store in original container.

**FURTHER INFORMATION ON STORAGE CONDITIONS**  
No data available

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS**  
Eyewash stations; Showers; Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

**RESPIRATORY PROTECTION**  
May be needed if product is used in a confined or poorly ventilated area. If exposure limits are

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exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

**PROTECTIVE GLOVES**

Impermeable or chemical resistant gloves.

**EYE AND FACE PROTECTION**

Safety glasses

**OTHER PROTECTIVE EQUIPMENT**

Wear suitable protective clothing and eye/face protection.

**Exposure Guidelines**

<u>Component</u>	<u>CAS RN</u>	<u>Source</u>	<u>Value</u>
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Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>BOILING POINT - C &amp; F:</b>	>150 °C; 302 °F; Copolymer
<b>VAPOR PRESSURE (20 C) (MM HG):</b>	< 1
<b>VAPOR DENSITY (AIR=1):</b>	> 1
<b>FREEZING POINT:</b>	< 0 °C; 32 °F
<b>MELTING POINT:</b>	< 0 °C; 32 °F
<b>PHYSICAL STATE:</b>	Liquid
<b>ODOR:</b>	Amine-like
<b>COLOR:</b>	Clear, pale
<b>EVAPORATION RATE (BUTYL ACETATE=1):</b>	< 1
<b>SPECIFIC GRAVITY (WATER=1):</b>	1.0270
<b>DENSITY:</b>	1,027 g/cm <sup>3</sup>
<b>ACID / ALKALINITY (MEQ/G):</b>	No data available
<b>VOLATILE ORGANIC CONTENT (VOL):</b>	Not determined
<b>SOLUBILITY IN WATER (20 C):</b>	Dispersible

**10. STABILITY AND REACTIVITY**

**STABILITY**

Stable



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**HAZARDOUS POLYMERIZATION**

Will not occur.

**HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS**

Burning can produce the following combustion products:; Oxides of carbon.; Oxides of nitrogen.; Oxides of silicon.; Formaldehyde.; Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant.; Acute overexposure to the products of combustion may result in irritation of the respiratory tract.; 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. A MSDS for formaldehyde is available from Momentive.

**INCOMPATIBILITY (MATERIALS TO AVOID)**

None currently known.

**CONDITIONS TO AVOID**

None known.

**11. TOXICOLOGICAL INFORMATION**

**ACUTE ORAL**

LD50; Species: Rat.; > 5,000 mg/kg;

**ACUTE DERMAL**

LD50; Species: Rat.; > 2,000 mg/kg;

**GENETIC TOXICITY IN VITRO**

Test Type: Salmonella Typhimurium/ Escherichia coli; Result: Negative

**SKIN IRRITATION**

Species: Rabbit.; Result: Slight irritation

**EYE IRRITATION**

Species: Rabbit. ; Result: Mild irritation

**MUTAGENICITY**

Negative in the Ames test.

**OTHER EFFECTS OF OVEREXPOSURE**

None currently known.

**12. ECOLOGICAL INFORMATION**

**ECOTOXICOLOGY**

All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this Safety Data Sheet.



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**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD**

Disposal should be made in accordance with federal, state and local regulations.

**14. TRANSPORT INFORMATION**

**Further Information:**

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

**15. REGULATORY INFORMATION**

**Inventories**

Canada NDSL Inventory	n (Negative listing)
Japan Inventory of Existing & New Chemical Substances (ENCS)	n (Negative listing)
Australia Inventory of Chemical Substances (AICS)	n (Negative listing)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	n (Negative listing)
Canada DSL Inventory	q (quantity restricted)
TSCA list	y (Positive listing)
Korea Existing Chemicals Inventory (KECI)	y (Positive listing)
China Inventory of Existing Chemical Substances	y (Positive listing)

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

**US Regulatory Information**

**SARA (311,312) HAZARD CLASS**  
Acute Health Hazard

**SARA (313) CHEMICALS**

**Canadian Regulatory Information**



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**WHMIS HAZARD CLASS**  
D2A VERY TOXIC MATERIALS

**CALIFORNIA PROPOSITION 65**  
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**16. OTHER INFORMATION**

**OTHER**

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