

# Material Safety Data Sheet

Version: 1.3  
03/29/2010

## TSF451-100 DIMETHYLPOLYSILOXANES

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Manufactured By:** Waterford Plant  
260 Hudson River Rd  
Waterford NY 12188

**Revised:** 03/29/2010  
**Preparer:** PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS  
**CHEMTREC** 1-800-424-9300

**Chemical Family/Use:** Silicone Fluid  
**Formula:** Polydimethylsiloxane

**HMIS**  
Flammability: 1      Reactivity: 0      Health: 0

**NFPA**  
Flammability: 1      Reactivity: 0      Health: 0

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Attention! This material is not considered hazardous by the OSHA Hazard Communication Standard 29 CFR 1910.1200 No dangerous reaction known under conditions of normal use.

**Form:** liquid      **Color:** clear      **Odor:** mild

#### POTENTIAL HEALTH EFFECTS

#### INGESTION

No adverse effects are expected under normal conditions of use.

#### SKIN

No adverse effects are expected under normal conditions of use.

#### INHALATION

No adverse effects are expected under normal conditions of use.

#### EYES

No adverse effects are expected under normal conditions of use. May cause slight irritation. May cause: - swelling of the conjunctivae

#### MEDICAL CONDITIONS AGGRAVATED

None known.

#### SUBCHRONIC (TARGET ORGAN )

None known.

# Material Safety Data Sheet

Version: 1.3  
03/29/2010

## **TSF451-100 DIMETHYLPOLYSILOXANES**

### **CHRONIC EFFECTS / CARCINOGENICITY**

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

### **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> |
|----------------------------|--------------------|---------------|
|----------------------------|--------------------|---------------|

### **A. HAZARDOUS**

### **B. NON-HAZARDOUS**

Polydimethylsiloxane

63148-62-9

60 - 100 %

## **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**

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**

Rinse with plenty of water. If symptoms persist, call a physician.

### **NOTE TO PHYSICIAN**

Treatment is symptomatic and supportive.

## **5. FIRE-FIGHTING MEASURES**

**FLASH POINT:**  
**METHOD:**

> 300 °C; 572 °F  
DIN 51376

# Material Safety Data Sheet

Version: 1.3  
03/29/2010

## TSF451-100 DIMETHYLPOLYSILOXANES

IGNITION TEMPERATURE: not applicable  
FLAMMABLE LIMITS IN AIR - LOWER (%): not applicable  
FLAMMABLE LIMITS IN AIR - UPPER (%): not applicable

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

Keep container closed when not in use. 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 containers tightly closed in a cool, well-ventilated place.

## 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

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or

# Material Safety Data Sheet

Version: 1.3  
03/29/2010

## TSF451-100 DIMETHYLPOLYSILOXANES

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 with side-shields

### OTHER PROTECTIVE EQUIPMENT

Wear suitable protective clothing and eye/face protection.

### Exposure Guidelines

| Component | CAS RN | Source | Value |
|-----------|--------|--------|-------|
|-----------|--------|--------|-------|

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

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

|  |                            |
|--|----------------------------|
| BOILING POINT - C & F:                         | >200 °C; 392 °F; Polymer   |
| VAPOR PRESSURE (20 C) (MM HG):                 | < 0.08                     |
| VAPOR DENSITY (AIR=1):                         | not applicable             |
| FREEZING POINT:                                | < -60 °C; -76 °F           |
| PHYSICAL STATE:                                | liquid                     |
| ODOR:  | mild                       |
| COLOR:   | clear                      |
| EVAPORATION RATE (BUTYL ACETATE=1):            | < 1                        |
| SPECIFIC GRAVITY (WATER=1):                    | ca. 0.97                   |
| DENSITY:                                       | ca. 0.97 g/cm <sup>3</sup> |
| ACID / ALKALINITY (MEQ/G):                     | ca. 0.12                   |
| pH:  | not applicable             |
| SOLUBILITY IN WATER (20 C):                    | insoluble                  |
| SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): | Slightly in Toluene        |
| VOC EXCL. H <sub>2</sub> O & EXEMPTS (G/L):    | 5 g/l                      |

## 10. STABILITY AND REACTIVITY

STABILITY  
Stable

# Material Safety Data Sheet

Version: 1.3  
03/29/2010

## TSF451-100 DIMETHYLPOLYSILOXANES

### HAZARDOUS POLYMERIZATION

Will not occur.

### HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS

Burning can produce the following combustion products:; Carbon dioxide (CO<sub>2</sub>); Carbon monoxide; Silicon dioxide.; 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 known.

### CONDITIONS TO AVOID

None known.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE ORAL

LD50; Species: rat; > 5,000 mg/kg;

### ACUTE DERMAL

LD50; Species: rabbit; > 10,000 mg/kg; Remarks: very low acute toxicity

### ACUTE INHALATION

LC50; Species: rat; > 535 mg/l; Remarks: very low acute toxicity

### OTHER

no data available

### SENSITIZATION

Test Type: Magnusson-Kligmann; Species: guinea pig; Result: negative. Method: OECD-Guideline 406 (Skin Sensitisation). Did not cause sensitization on laboratory animals.

### SKIN IRRITATION

Species: rabbit; Result: No skin irritation

### EYE IRRITATION

Species: rabbit ; Result: No eye irritation

### MUTAGENICITY

Negative in the Ames test.

# Material Safety Data Sheet

Version: 1.3  
03/29/2010

## TSF451-100 DIMETHYLPOLYSILOXANES

### 12. ECOLOGICAL INFORMATION

#### ECOTOXICITY

no data available

#### DISTRIBUTION

no data available

#### CHEMICAL FATE

no data available

### 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

|  |                      |                   |
|--|----------------------|-------------------|
| Australia Inventory of Chemical Substances (AICS)                  | y (positive listing) |                   |
| EU list of existing chemical substances                            | y (positive listing) |                   |
| Japan Inventory of Existing & New Chemical Substances (ENCS)       | y (positive listing) |                   |
| China Inventory of Existing Chemical Substances                    | y (positive listing) |                   |
| Korea Existing Chemicals Inventory (KECI)                          | y (positive listing) |                   |
| Canada DSL Inventory   | y (positive listing) |                   |
| Canada NDSL Inventory  | n (Negative listing) |                   |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS) | y (positive listing) |                   |
| TSCA list  | y (positive listing) | On TSCA Inventory |

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

# Material Safety Data Sheet

Version: 1.3  
03/29/2010

## TSF451-100 DIMETHYLPOLYSILOXANES

### US Regulatory Information

**SARA (311,312) HAZARD CLASS**  
No SARA Hazards

**SARA (313) CHEMICALS**

### **CALIFORNIA PROPOSITION 65**

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

### Canadian Regulatory Information

**WHMIS HAZARD CLASS**  
- Non-controlled.

## 16. OTHER INFORMATION

### OTHER

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)., 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.