1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: Momentive Performance Materials - Waterford  
260 Hudson River Rd  
Waterford NY 12188  

Revised: 09/27/2012  
Prepared by Product Regulatory Compliance 
CHEMTREC 1-800-424-9300  
MSDS Contact 1-888-443-9466  
Information 4information@momentive.com  

Chemical Family/Use: Silicone Polymer  
Formula: Component in personal care products  

HMIS  
Health: 1  Flammability: 2  Reactivity: 0  

NFPA  
Health: 1  Flammability: 2  Reactivity: 0  

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW  
CAUTION! COMBUSTIBLE. Adverse liver and reproductive effects reported in animals.  

Form: Paste  
Form: Colorless  
Odor: Odorless  

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.  

MEDICAL CONDITIONS AGGRAVATED  
None known.
VELVESIL 125
Silicone Gel in D5

SUBCHRONIC (TARGET ORGAN)
Liver; Reproductive hazard.

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

<table>
<thead>
<tr>
<th>PRODUCT COMPOSITION</th>
<th>CAS-No.</th>
<th>WGT. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decamethylcyclopentasiloxane</td>
<td>541-02-6</td>
<td>60 - 100 %</td>
</tr>
<tr>
<td>Mixed Cyclosiloxanes</td>
<td>69430-24-6</td>
<td>1 - 5 %</td>
</tr>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>556-67-2</td>
<td>0.1 - 1 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

INGESTION
If swallowed, do NOT induce vomiting. Give a glass of water. Get medical attention. Never give liquid to an unconscious person.

SKIN
Wash 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 the event of contact with the eyes, rinse thoroughly with clean water. Get medical attention if symptoms occur.
NOTE TO PHYSICIAN
Treatment is symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

FLASH POINT: ca. 76.66 ºC; 170 ºF
METHOD Closed Cup
IGNITION TEMPERATURE: No data available.
SENSITIVITY TO MECHANICAL IMPACT: No

SENSITIVITY TO STATIC DISCHARGE
Sensitivity to static discharge is expected; material has a flash point below 200 F.

EXTINGUISHING MEDIA
All standard extinguishing agents are suitable.

SPECIAL FIRE FIGHTING PROCEDURES
Combustible, 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
Warn other workers of spill. Wear proper protective equipment as specified in the protective equipment section. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Ground container and transfer equipment to eliminate static electric sparks. Remove sources of ignition. Avoid contact with eyes, skin, and clothing. Keep out of reach of children. Attention: Not for injection into humans. May generate formaldehyde at temperatures greater than 150 C(300 F). See Section 8 of the MSDS for Personal Protective Equipment.

STORAGE
Keep away from heat, sparks and open flame. Store in original container.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS
Eye wash facilities and emergency shower must be available when handling this product.; 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 emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

PROTECTIVE GLOVES
Chemical resistant gloves

OTHER PROTECTIVE EQUIPMENT
Wear suitable protective clothing and eye/face protection.

Exposure Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decamethylcyclopentasiloxane</td>
<td>541-02-6</td>
<td>Z_INTL_OEL, REL</td>
<td>10 ppm</td>
</tr>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>556-67-2</td>
<td>Z_INTL_OEL, REL</td>
<td>5 ppm</td>
</tr>
</tbody>
</table>

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


9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°C): 210 °C; 410 °F
VAPOR PRESSURE (20 C) (MM HG): < 1
VAPOR DENSITY (AIR=1): < 1
FREEZING POINT: ca. -44 °C; -47 °F
PHYSICAL STATE: Paste
ODOR: Odorless
Color: Colorless
10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION.
Hazardous polymerisation does not occur.

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS
Carbon oxides; Oxides of silicon.; Formaldehyde.; This product contains methylpolysiloxanes which will likely 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 has been classified by the National Toxicology Program as as a known human carcinogen. A MSDS for formaldehyde is available from Momentive. See Section 11 for additional information on formaldehyde.

INCOMPATIBLE MATERIALS
None known.

CONDITIONS TO AVOID
Keep away from heat, sparks and open flame. Keep away from sources of ignition - No smoking.

11. TOXICOLOGICAL INFORMATION

GENERAL
Product has been tested.

ACUTE ORAL
LD50; Species: Rat; > 2,000 mg/kg; Method: OECD-Guideline 423 (Acute Oral Toxicity - Acute Toxic Class Method)

CARCINOGENICITY
The National Toxicology Program (NTP) classifies formaldehyde as "known to be a human carcinogen" with respect to nasopharyngeal cancer, sinonasal cancer and myeloid leukemia. The International Agency for Research on Cancer (IARC) classifies formaldehyde as "carcinogenic to humans". U.S. OSHA regulates formaldehyde as a potential human carcinogen. See the OSHA Formaldehyde Workplace Standard at 29 CFR 1920.1048 (the "OSHA Standard"). Safe handling and use instructions are provided in this MSDS and in the OSHA Standard. OSHA has identified 0.5 ppm, calculated as an eight-hour time-weighted average (“TWA”) concentration, as the "Action Level". Please review and
understand the guidance contained in this MSDS, and refer to the OSHA Standard for regulatory requirements that might be applicable to your operation and use. Many studies and other evaluations have been performed concerning formaldehyde’s potential to cause cancer. To review some of these studies and for further information go to www.osha.gov; http://monographs.iarc.fr; http://ntp-server.niehs.nih.gov; http://epa.gov; http://www.nap.edu and other authoritative websites then search on formaldehyde.

ACUTE DERMAL  
LD50; Species: Rabbit; > 2,000 mg/kg; Method: OPPTS 870.1200

ACUTE INHALATION  
Remarks: No data available.

OTHER  
Decamethylcyclopentasiloxane  
Rodents repeatedly exposed to decamethylcyclopentasiloxane (D5) via inhalation or ingestion developed increased liver weights relative to unexposed control animals. When the exposure was stopped, livers returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Liver enlargement was due to an increase in metabolizing enzymes, and a temporary increase in the number and size of normal cells (hyperplasia and hypertrophy). These biochemical pathways are more sensitive in rodents than in humans. Inhalation exposures that are typical in industrial use (5-10 ppm) showed no toxic effects in rodents.

A two-year combined chronic toxicity and carcinogenicity inhalation study was conducted with decamethylcyclopentasiloxane (D5) in Fisher-344 rats by whole body inhalation. A statistically significant increase in the trend for uterine endometrial tumors was observed in female rats exposed for 24 months at the highest dose level of 160 ppm. The same effects were not seen at the other dose levels of 10 and 40 ppm. No adverse effects were seen at male rats at any level. Whether or not this increase in incidence is truly related to the exposure to D5 is questionable and yet to be determined. Based on our present knowledge, it is unlikely that industrial, commercial, or consumer uses of products containing D5 would result in a significant risk to humans. Momentive's Recommended Exposure Guideline for D5 is 10 ppm.

Octamethylcyclotetrasiloxane  
Ingestion: Rodents given large doses via oral gavages 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 appear 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
VELVESIL 125
Silicone Gel in D5

and in implantation sites. No D4 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 statistically significant decrease in live mean litter size as well as extended periods of off-spring delivery (dystocia). These results were not observed at the 70 and 300ppm dosing levels.

Preliminary results from an ongoing 24-month combined chronic/oncogenicity study in rats exposed to 10, 30, 150, or 700 ppm D4 showed test-article related effects in the kidney (male and female) and uterus of rats exposed for 12 to 24 months. These effects include increased kidney weight and severity of chronic nephropathy, increased uterine weight, increased incidence of endometrial cell hyperplasia, and an increased incidence of endometrial adenomas. All of these effects are limited to the 700 ppm exposure group.

These results have been shown to be rat-specific. 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.

SENSITIZATION
Test type: Sensitisation, skin; Species: Mouse; Result: negative. Method: OECD Guideline 429 (LLNA).

SKIN IRRITATION
Species: Rabbit; Non irritating

EYE IRRITATION
Species: Rabbit; Result: No eye irritation. Method: OPPTS 870.2400.

MUTAGENICITY
Not mutagenic in Ames Test.

12. ECOLOGICAL INFORMATION

ECOTOXICITY
No data available.

DISTRIBUTION
No data available.
13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: Combustible liquid, n.o.s.(Decamethylcyclopentasiloxane)
DOT HAZARD CLASS: CBL
DOT LABEL (S): NON
UN/NA NUMBER: NA 1993
PACKING GROUP: III

Further Information: This product is Combustible as defined by the US Department of Transportation (DOT). It is regulated for transport in the US in container > 119 gallons. The product is not regulated for transport by the IATA, ADR/RID, ADNR or the IMDG regulations.

15. REGULATORY INFORMATION

Inventories
Australia Inventory of Chemical Substances (AICS) q (quantity restricted)
EU list of existing chemical substances y (positive listing)
Japan Inventory of Existing & New Chemical Substances (ENCS) t (temporary special case)
China Inventory of Existing Chemical Substances y (positive listing)
Korea Existing Chemicals Inventory (KECI) y (positive listing)
Canada DSL Inventory y (positive listing)
Canada NDSDL Inventory n (Negative listing)
Philippines Inventory of Chemicals and Chemical Substances (PICCS) y (positive listing)
TSCA list e (special case)

The mixture contains a polymer. The monomers for this polymer have been notified.
This product is intended only for personal care applications. It is not intended for
VELVESIL 125
Silicone Gel in D5

industrial use; therefore, it is not subject to TSCA.

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

US Regulatory Information

SARA (311,312) HAZARD CLASS
Fire Hazard

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 CLASSIFICATION
B3 - B3: Combustible liquid
D2A - Very Toxic Material Causing Other Toxic Effects

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).