DOW CORNING CORPORATION
Material Safety Data Sheet

DOW CORNING(R) WL-9653 SILICONE FILM DEVELOPER DEV SAMPLE

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Dow Corning Corporation
South Saginaw Road
Midland, Michigan  48686

24 Hour Emergency Telephone:  (989) 496-5900
Customer Service:  (989) 496-6000
Product Disposal Information:  (989) 496-6315
CHEMTREC:  (800) 424-9300

MSDS No.: 04046103
Revision Date:  2004/02/05

Generic Description: Aliphatic hydrocarbon
Physical Form: Liquid
Color: Colorless
Odor: Solvent odor.

NFPA Profile: Health 2 Flammability 2 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Wt %</th>
<th>Component Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>8052-41-3</td>
<td>&gt; 60.0</td>
<td>Stoddard solvent</td>
</tr>
</tbody>
</table>

The above components are hazardous as defined in 29 CFR 1910.1200.

3. EFFECTS OF OVEREXPOSURE

Acute Effects
Eye: Direct contact may cause mild irritation. Vapor may cause eye irritation.
Skin: No significant irritation expected from a single short-term exposure.
Inhalation: Vapor may irritate nose and throat. Overexposure by inhalation may cause central nervous system depression which may be characterized by drowsiness, dizziness, confusion, loss of coordination, unconsciousness, and at very high concentrations even death.
Oral: Aspiration of liquid while vomiting may injure lungs seriously.

Prolonged/Repeated Exposure Effects
Skin: Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.
Inhalation: No known applicable information.
Oral: Repeated ingestion or swallowing large amounts may injure internally.

Signs and Symptoms of Overexposure
No known applicable information.
Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes.

Skin: Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.

Inhalation: Remove to fresh air. Get immediate medical attention.

Oral: Get immediate medical attention. Only induce vomiting at the instructions of a physician. Never give anything by mouth to an unconscious person.

Comments: Treat according to person’s condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point: 119.8 °F / 48.8 °C (Closed Cup)

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO2), dry chemical or water spray. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire Hazards: Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.

6. ACCIDENTAL RELEASE MEASURES
Containment/Clean up: Remove possible ignition sources. Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbant. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call Dow Corning Corporation, (989) 496-5900, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Avoid eye exposure. Avoid skin contact. Do not breathe vapor, mist, dust, or fumes. Keep container closed. Do not take internally.

Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Keep container closed and away from heat, sparks, and flame.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Component Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>8052-41-3</td>
<td>Stoddard solvent</td>
<td>OSHA PEL (final rule): TWA 500 ppm and ACGIH TLV: TWA 100 ppm.</td>
</tr>
</tbody>
</table>

Engineering Controls

Local Ventilation: Recommended.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.


Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or air sampling data show exposures are within recommended exposure guidelines. Industrial Hygiene Personnel can assist in judging the adequacy of existing engineering controls.
Suitable Respirator: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits as determined by air sampling or are unknown, appropriate respiratory protection should be worn. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal Protective Equipment for Spills

Eyes: Use full face respirator.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Precautionary Measures: Avoid eye exposure. Avoid skin contact. Do not breathe vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Use reasonable care.

Comments: When heated to temperatures above 150 °C (300 °F) in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate eyes, nose, and throat. Safe handling conditions may be maintained by keeping vapor conditions within the OSHA permissible exposure limit for formaldehyde.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the use of silicone-based materials in aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Solvent odor.</td>
</tr>
<tr>
<td>Specific Gravity @ 25°C:</td>
<td>0.758</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Freezing/Melting Point:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>&gt; 170 °C</td>
</tr>
<tr>
<td>Vapor Pressure @ 25°C:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>4.9</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Volatile Content:</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Note: The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.
10. STABILITY AND REACTIVITY

Chemical Stability: Stable.
Hazardous Polymerization: Hazardous polymerization will not occur.
Conditions to Avoid: None.
Materials to Avoid: Oxidizing material can cause a reaction.

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components
No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution
Complete information is not yet available.

Environmental Effects
Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants
Complete information is not yet available.

Ecotoxicity Classification Criteria

<table>
<thead>
<tr>
<th>Hazard Parameters (LC50 or EC50)</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Aquatic Toxicity (mg/L)</td>
<td>&lt;=1</td>
<td>&gt;1 and &lt;=100</td>
<td>&gt;100</td>
</tr>
<tr>
<td>Acute Terrestrial Toxicity</td>
<td>&lt;=100</td>
<td>&gt;100 and &lt;= 2000</td>
<td>&gt;2000</td>
</tr>
</tbody>
</table>

This table is adapted from “Environmental Toxicology and Risk Assessment”, ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? NOT ASSESSED

State or local laws may impose additional regulatory requirements regarding disposal.

Call Dow Corning Corporate Environmental Management, (989) 496-6315, if additional information is required.
14. TRANSPORT INFORMATION

**DOT Road Shipment Information (49 CFR 172.101)**

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>PETROLEUM DISTILLATES, N.O.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>COMBUSTIBLE LIQUID</td>
</tr>
<tr>
<td>UN/NA Number:</td>
<td>UN1268</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>III</td>
</tr>
<tr>
<td>Remarks:</td>
<td>Above applies only to containers over 119 gallons or 450 liters.</td>
</tr>
</tbody>
</table>

**Ocean Shipment (IMDG)**

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>PETROLEUM DISTILLATES, N.O.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>3</td>
</tr>
<tr>
<td>UN Number:</td>
<td>1268</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>III</td>
</tr>
<tr>
<td>Hazard Label(s):</td>
<td>FLAMMABLE LIQUID</td>
</tr>
<tr>
<td>Marine Pollutant:</td>
<td>Not Applicable</td>
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**Air Shipment (IATA)**

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Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

15. REGULATORY INFORMATION


**TSCA Status:**

For R&D purposes only. One or more of the components of this product may not be listed on the TSCA inventory of chemical substances. Product should be used solely for scientific experimentation, research or analysis under the supervision of technically qualified individuals.

**EPA SARA Title III Chemical Listings**
Section 302 Extremely Hazardous Substances:

None.

Section 304 CERCLA Hazardous Substances:

None.

Section 312 Hazard Class:
Acute: Yes
Chronic: No
Fire: Yes
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:

None present or none present in regulated quantities.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

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16. OTHER INFORMATION

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby 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.

(R) indicates Registered Trademark