

# DOW CORNING CORPORATION

## Material Safety Data Sheet

Page: 1 of 11

Version: 6.0

Revision Date: 2011/11/01

### DOW CORNING(R) 997 VARNISH

#### 1. PRODUCT AND COMPANY IDENTIFICATION

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.: 01002015

Revision Date: 2011/11/01

Generic Description: Silicone resin.

Physical Form: Liquid

Color: Brown

Odor: Solvent odor.

NFPA Profile: Health 2 Flammability 3 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

#### 2. HAZARDS IDENTIFICATION

##### POTENTIAL HEALTH EFFECTS

##### Acute Effects

**Eye:** Direct contact may cause mild irritation. Vapor may cause eye irritation.

**Skin:** May cause severe irritation.

**Inhalation:** Vapor may irritate nose and throat. Overexposure by inhalation may cause drowsiness, dizziness, confusion or loss of coordination.

**Oral:** Low ingestion hazard in normal use.

##### 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:** Overexposure by inhalation may injure the following organ(s): Liver. Kidneys. Nervous system.

**Oral:** Repeated ingestion or swallowing large amounts may injure internally.

##### Other Health Effects

This product contains a chemical(s) that has the following effect(s):  
Developmental Toxicity  
Carcinogenicity

## DOW CORNING(R) 997 VARNISH

See Section 11 for specific details.

**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.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
1330-20-7	30.0 - 50.0	Xylene
100-41-4	10.0 - 30.0	Ethylbenzene
8001-26-1	3.0 - 7.0	Linseed Oil
64742-94-5	3.0 - 7.0	Heavy aromatic petroleum solvent naphtha
91-20-3	<1.0	Naphthalene

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

**4. FIRST AID MEASURES**

Eye:	Remove from the source of contamination or move to fresh air. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes while holding the eyelid(s) open. Obtain medical attention.
Skin:	As quickly as possible remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Immediately flush with lukewarm gently flowing water for 15 minutes. Completely decontaminate clothing, shoes and leather goods before reuse or discard. Immediately obtain medical attention.
Inhalation:	Remove from the source of contamination or move to fresh air. Obtain medical attention.
Oral:	If irritation or discomfort occur, obtain medical advice.
Notes to Physician:	Treat according to person's condition and specifics of exposure.

## DOW CORNING(R) 997 VARNISH

## 5. FIRE FIGHTING MEASURES

Flash Point:	77 °F / 25 °C (Pensky-Martens 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 (CO <sub>2</sub> ), 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:	Vapors are heavier than air and may travel to a source of ignition and flash back. Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge.

## 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.
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Note: See Section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

## 7. HANDLING AND STORAGE

Use with adequate ventilation. Traces of benzene (carcinogen) may form if heated in air above 300°F (149°C). Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA benzene regulation for detailed information on safe handling requirements. Avoid eye exposure. Do not get on skin. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally.

## DOW CORNING(R) 997 VARNISH

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**

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
1330-20-7	Xylene	Observe xylene limits. OSHA PEL (final rule) and ACGIH TLV: TWA 100 ppm, STEL 150 ppm.
100-41-4	Ethylbenzene	OSHA PEL (final rule): TWA 100 ppm, 435 mg/m <sup>3</sup> . ACGIH TLV: TWA 20 ppm, STEL 125 ppm.
64742-94-5	Heavy aromatic petroleum solvent naphtha	Observe petroleum distillates limits. OSHA PEL (final rule): TWA 400 ppm.
91-20-3	Naphthalene	OSHA PEL (final rule): TWA 10 ppm and ACGIH TLV-skin: TWA 10 ppm, STEL 15 ppm.

**Engineering Controls**

Local Ventilation: Recommended.  
General Ventilation: Recommended.

**Personal Protective Equipment for Routine Handling**

Eyes: Use chemical worker's goggles.

Skin: Wash at mealtime and end of shift. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc.). Use chemical protective gloves as a minimum and wash skin promptly upon any skin contact.

Suitable Gloves: Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.

## DOW CORNING(R) 997 VARNISH

**Suitable Respirator:** General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits 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. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc.). Use chemical protective gloves as a minimum and wash skin promptly upon any skin contact.

**Inhalation/Suitable Respirator:** Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA 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. Do not get on skin. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Use reasonable care.

**Comments:** Traces of benzene (carcinogen) may form if heated in air above 300°F (149°C). Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA benzene regulation for detailed information on safe handling requirements.

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](http://www.SEHSC.com)) or contact the Dow Corning customer service group.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid

Color: Brown

Odor: Solvent odor.

Specific Gravity @ 25°C: 1.002

Viscosity: 105 cSt

Freezing/Melting Point: Not determined.

## DOW CORNING(R) 997 VARNISH

Boiling Point: > 130 °C  
 Vapor Pressure @ 25°C: Not determined.  
 Vapor Density: Not determined.  
 Solubility in Water: Not determined.  
 pH: Not determined.  
 Volatile Content: Not determined.  
 Flash Point: 77 °F / 25 °C (Pensky-Martens Closed Cup)  
 Autoignition Temperature: Not determined.  
 Flammability Limits in Air: Not determined.

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.

Hazardous Decomposition Products

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

## 11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components**Carcinogens**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>	
100-41-4	10.0 - 30.0	Ethylbenzene	IARC Group 2B - Possibly Carcinogenic to Humans.
91-20-3	<1.0	Naphthalene	IARC Group 2B - Possibly Carcinogenic to Humans. NTP - Reasonably Anticipated to be a Human Carcinogen.

**Developmental Toxicity**

## DOW CORNING(R) 997 VARNISH

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
1330-20-7	30.0 - 50.0	Xylene

**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

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

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? Yes

Characteristic Waste:

Ignitable: D001

TCLP: D018

State or local laws may impose additional regulatory requirements regarding disposal. Call (989) 496-6315, if additional information is required.

**14. TRANSPORT INFORMATION****DOT Road Shipment Information (49 CFR 172.101)**

Proper Shipping Name: Flammable liquids, n.o.s.

**DOW CORNING(R) 997 VARNISH**

Hazard Technical Name: Xylene / Ethylbenzene

Hazard Class: 3

UN/NA Number: UN 1993

Packing Group: III

Hazard Label(s): Flammable Liquid

**Ocean Shipment (IMDG)**

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

Hazard Technical Name: Xylene / Ethylbenzene

Hazard Class: 3

UN/NA Number: UN 1993

Packing Group: III

Hazard Label(s): flammable liquid

**Air Shipment (IATA)**

Proper Shipping Name: Flammable liquid, n.o.s.

Hazard Technical Name: Xylene / Ethylbenzene

Hazard Class: 3

UN/NA Number: UN 1993

Packing Group: III

Hazard Label(s): Flammable Liquid

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

**15. REGULATORY INFORMATION**

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

**EPA SARA Title III Chemical Listings**



## DOW CORNING(R) 997 VARNISH

**Section 302 Extremely Hazardous Substances (40 CFR 355):**

None.

**Section 304 CERCLA Hazardous Substances (40 CFR 302):**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
1330-20-7	35.0	Xylene
100-41-4	11.0	Ethylbenzene
91-20-3	0.46	Naphthalene

**Section 311/312 Hazard Class (40 CFR 370):**

Acute: Yes  
 Chronic: Yes  
 Fire: Yes  
 Pressure: No  
 Reactive: No

**Section 313 Toxic Chemicals (40 CFR 372):**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
1330-20-7	35.0	Xylene
100-41-4	11.0	Ethylbenzene
91-20-3	0.46	Naphthalene

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

**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.

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>	
100-41-4	10.0000 - 30.0000	Ethylbenzene	Carcinogenic.
91-20-3	<1.0000	Naphthalene	Carcinogenic.
108-88-3	<0.1000	Toluene	Developmental toxin.

## DOW CORNING(R) 997 VARNISH

136-52-7	<0.1000	Cobalt bis(ethylhexanoate)	Carcinogenic.
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62-53-3	<0.0100	Aniline	Carcinogenic.
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**Massachusetts**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
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1330-20-7	30.0 - 50.0	Xylene
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100-41-4	10.0 - 30.0	Ethylbenzene
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62-53-3	<0.1	Aniline
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**New Jersey**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
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68037-66-1	40.0 - 60.0	Dimethyl, methyl, phenyl, phenylmethyl silicone resin
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1330-20-7	30.0 - 50.0	Xylene
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100-41-4	10.0 - 30.0	Ethylbenzene
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8001-26-1	3.0 - 7.0	Linseed Oil
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64742-94-5	3.0 - 7.0	Heavy aromatic petroleum solvent naphtha
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91-20-3	<1.0	Naphthalene
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**Pennsylvania**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
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68037-66-1	40.0 - 60.0	Dimethyl, methyl, phenyl, phenylmethyl silicone resin
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1330-20-7	30.0 - 50.0	Xylene
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100-41-4	10.0 - 30.0	Ethylbenzene
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8001-26-1	3.0 - 7.0	Linseed Oil
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64742-94-5	3.0 - 7.0	Heavy aromatic petroleum solvent naphtha
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**DOW CORNING CORPORATION**  
**Material Safety Data Sheet**

Page: 11 of 11

Version: 6.0

Revision Date: 2011/11/01

**DOW CORNING(R) 997 VARNISH****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.

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