

## MATERIAL SAFETY DATASHEET

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MSDS-0102  
Thermcoat SL  
Rev. Date 01/27/09  
Supersedes: 03/25/07

## SECTION 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:****Section 302 Extremely Hazardous Substances (40 CFR 355):** None**Section 304 CERCLA Hazardous Substances (40 CFR 302):**

Cas Number	Wt %	Component Name
1330-20-7	35.0	Xylene
100-41-4	10.9	Ethylbenzene
91-20-3	<=0.46	Naphthalene
108-88-3	0.15	Toluene

**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):**

Cas Number	Wt %	Component Name
1330-20-7	35.0	Xylene
100-41-4	10.9	Ethylbenzene

**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.

Cas Number	Wt %	Component Name	
100-41-4	10.0 - 30.0	Ethylbenzene	Carcinogenic
91-20-3	<=0.4	Naphthalene	Carcinogenic
108-88-3	<=1.0	Toulene	Developmental toxin

**Massachusetts**

Cas Number	Wt %	Component Name
1330-20-7	30.0 to 60.0	Xylene
100-41-4	10.0 to 30.0	Ethylbenzene

**New Jersey**

Cas Number	Wt %	Component Name
68037-66-1	40.0 to 70.0	Dimethyl, methyl, phenyl, phenylmethyl silicone resin
1330-20-7	30.0 to 60.0	Xylene
100-41-4	10.0 to 30.0	Ethylbenzene
64742-94-5	3.0 - 7.0	Heavy aromatic petroleum solvent naphtha
8001-26-1	3.0 to 7.0	Linseed oil
91-20-3	<=0.4	Naphthalene

**Pennsylvania**

Cas Number	Wt %	Component Name
68037-66-1	40.0 to 70.0	Dimethyl, methyl, phenyl, phenylmethyl silicone resin
1330-20-7	30.0 to 60.0	Xylene
100-41-4	10.0 to 30.0	Ethylbenzene
64742-94-5	3.0 to 7.0	Heavy aromatic petroleum solvent naphtha
8001-26-1	3.0 to 7.0	Linseed oil

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## SECTION 1. IDENTIFICATION

**PRODUCT (TRADE) NAME:** Thermcoat SL (Silicone Lacquer Varnish)**CHEMICAL FAMILY:** Silocone Resin**SUPPLIER:** OMEGA Engineering Inc.**ADDRESS:** P. O. Box 4047  
Stamford, CT 06907**TELEPHONE:** (203) 359-1660

## SECTION 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW****EYE:** Direct contact may cause severe irritation. Vapor may cause eye irritation.**SKIN:** May cause moderate irritation.**INHALATION:** Vapor may irritate nose and throat. Overexposure by inhalation may cause drowsiness, dizziness, confusion or loss of coordination.**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. Repeated skin contact may cause allergic skin reaction. Overexposure may injure internally if absorbed.**INHALATION:** Overexposure by inhalation may injure the following organ(s): Nervous system. Liver. Kidneys. Lungs.**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.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT:	CAS NUMBER	CONCENTRATION (% by weight)
Xylene	1330-20-7	30.0 - 60.0
Ethylbenzene	100-41-4	10.0 - 30.0
Heavy aromatic petroleum solvent naphtha	64742-94-5	3.0 - 7.0
Linseed Oil	8001-26-1	3.0 - 7.0
Naphthalene	91-20-3	<=0.4
Toluene	108-88-3	<1.0

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



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#### SECTION 4. FIRST AID MEASURES

**EYE:** Immediately flush with water for 15 minutes. Get medical attention.

**SKIN:** Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation or ill effects develop or persists.

**INHALATION:** Remove to fresh air. Get medical attention if ill effects persist.

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

**NOTES TO PHYSICIAN:** Treat according to person's condition and specifics of exposure.

#### SECTION 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 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 AND EXPLOSION 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.



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#### SECTION 13. DISPOSAL INFORMATION

##### 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 OMEGA Engineering, Inc., (203) 359-1660 if additional information is required.

#### SECTION 14. TRANSPORT INFORMATION

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

**PROPER SHIPPING NAME:** Flammable Liquids, n.o.s.

**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 OMEGA Engineering, Inc., (203) 359-1660 if additional information is required.



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## SECTION 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. Metal oxides. Silicon dioxide. Formaldehyde.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Special Hazard Information on Components

#### Carcinogens

CAS Number	Wt %	Component Name	
100-41-4	10.0 - 30.0	Ethylbenzene	IARC Group 2B - Possibly Carcinogenic to Humans.
91-20-3	<=0.4	Naphthalene	IARC Group 2B - Possibly Carcinogenic to Humans NTP -Reasonably Anticipated to be a Human Carcinogen.

#### Teratogens

CAS Number	Wt %	Component Name	
100-41-4	10.0 - 30.0	Ethylbenzene	Evidence of teratogenicity (birth defects) in laboratory animals.

#### Mutagens

CAS Number	Wt %	Component Name	
100-41-4	10.0 - 30.0	Ethylbenzene	Genetically active in IN VIVO assay(s).

#### Sensitizers

CAS Number	Wt %	Component Name	
8001-26-1	3.0 - 7.0	Linseed Oil	Possible skin sensitizer.

## SECTION 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE AND DISTRIBUTION:** Complete information is not yet available.

**ENVIRONMENTAL EFFECTS:** Complete information is not yet available.

### FATES 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.



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## SECTION 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 absorbent. Clean area as appropriate since some spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal law 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 OMEGA Engineering, Inc., (203) 359-1660 (ref P/N 997R), if additional information is required.

## SECTION 7. HANDLING AND STORAGE

### 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. Avoid skin contact. Avoid breathing 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.



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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS Number	Component Name	Exposure Limits
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/m3. ACGIH TLV: TWA 100 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. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.

**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 personal protective 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.

**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. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.

**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.



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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONT'D)

**PRECAUTIONARY MEASURES:** Avoid eye exposure. Avoid skin contact. 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 300°F (149°C) in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer. Vapors irritate eyes, nose, and throat. Safe handling conditions may be maintained by keeping vapor concentrations 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 call Call OMEGA Engineering, Inc., (203) 359-1660 (ref P/N 997R), if additional information is required.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL FORM:</b>	Liquid
<b>COLOR:</b>	Brown
<b>ODOR:</b>	Solvent Odor.
<b>SPECIFIC GRAVITY @ 25°C:</b>	1.002
<b>VISCOSITY:</b>	105 cSt
<b>FREEZING/MELTING POINT:</b>	Not Determined.
<b>BOILING POINT:</b>	>130°C/266°F
<b>VAPOR PRESSURE @25°C:</b>	Not Determined.
<b>VAPOR DENSITY:</b>	Not Determined.
<b>SOLUBILITY IN WATER:</b>	Not Determined.
<b>pH:</b>	Not Determined.
<b>VOLATILE CONTENT:</b>	Not Determined.
<b>FLASH POINT:</b>	77°F/25°C (Pensky-Martens Closed Cup)
<b>AUTOIGNITION TEMPERATURE:</b>	Not Determined.
<b>FLAMMABILITY LIMITS IN AIR:</b>	Not Determined.

**NOTE:** The above information is not intended for use in preparing product specifications. Contact OMEGA Engineering, Inc., (203) 359-1660 (ref P/N 997R) before writing specifications.