

## MATERIAL SAFETY DATA SHEET

### 1. Product Information

Product Name: Novolac 555  
Product Class: Epoxy Coating                      Product Code: CG025-B

### 2. Composition/Information on Ingredients

Chemical Name	CAS Number	Weight Percent	Occup. Exposure Limits		Vapor Pressure	
			OSHA PEL	ACGIH TLV	mm Hg	and Temp. F
Epoxy Novolac Resin	Mixture	30-35	N/E (Not established)		N/E	N/E
*Xylene	1330-20-7	10-15	100 ppm	100 ppm	5.1	68
Glycol Ether PM Acetate	108-65-6	5-10	N/E (Not established)		3.7	68
Silicon Dioxide	14808-60-7	27-31				

Silicon Dioxide is a crystalline Silica in the form of quartz

OSHA PEL: Exposure to airborne crystalline silica shall not exceed an 8 hour time weighted average limit as stated in 29CFR 1910.1000, Table Z-1-A Air Contaminants, Specifically; Silica, Crystalline Quartz (Respirable) 0.1 MG/M3. ACGTIH TLV-TWA: 0.1 MG/M3. NIOSH Maximum permissible conc. 0.05 MG/M3, 10 hr. workday. 40 hr. week.

\*Indicates toxic chemical(s) subject to reporting requirements of Section 313 of Title III and of 40 CFR 372.

### 3. Physical Data

**Boiling Range (Deg. F):** 300°F                      **Vapor Density:** Heavier than air                      **Evaporation Rate:** Slower than Ether                      **Percent Volatile By Volume:** 19                      **Weight Per Gallon (lbs.):** 14.2 ± .2

### 4. Fire and Explosion Hazard Data

**Flash Point (Deg.F):** 82° F                      **Lower Explosive Limit:** 1.0                      **Extinguishing Media:** Foam, alcohol foam, CO2, dry chemical  
OSHA Flammability Classification: Flammable Liquid IC                      **Special Firefighting Procedures:** Wear a NIOSH/MSHA approved self contained breathing apparatus and full protective clothing. Use water to keep fire exposed containers cool. Water may be ineffective as an extinguishing agent.  
**Unusual Fire and Explosion Hazards:** Vapors are heavier than air and may travel along the ground or be moved by ventilation to ignition sources at locations distant from material handling point. Pressure may build up in containers and create an explosion hazard.

### 5. Health Hazard Data

**THIS PRODUCT IS FLAMMABLE.**                      **Effects of Overexposure:**                      **Eyes:** Irritation, burning, tearing and redness.                      **Skin:** Moderate irritation or defatting of skin upon prolonged or repeated contact.                      **Ingestion:** Abdominal pain, nausea, vomiting and diarrhea.                      **Inhalation:** Excessive exposure to vapors can cause headache, dizziness, uncoordination, nausea and loss of consciousness.  
**Emergency and First Aid Procedures:**                      **Eyes:** Flush with water for 15 minutes.                      **Skin:** Remove contaminated clothing, wash skin with soap and water.                      **Ingestion:** DO NOT induce vomiting. Get medical attention immediately.                      **Inhalation:** Move to fresh air, aid breathing if necessary.  
**In all cases, consult a physician for best treatment.**                      **Chemical listed as carcinogen or potential carcinogen:** NTP: Yes IARC: Yes OSHA: No

### 6. Reactivity Data

**Stability:** Product Stable                      **Conditions to Avoid:** All sources of ignition                      **Incompatibility (Materials to avoid):** Oxidizing agents, strong acids and bases.                      **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, nitrogen oxides and organic compounds.  
**Hazardous Polymerization:** Will not occur.

### 7. Spill or Leak Procedures

**Steps to be taken in case material is released or spilled:** Dike spill area. Absorb spill with inert absorbent material. Place in sealed metal containers for proper disposal.                      **Waste Disposal Method:** Dispose of in accordance with local, state and federal regulations.

### 8. Special Protection Information

**Respiratory Protection:** Use a NIOSH/MSHA jointly approved respirator                      **Ventilation:** Use mechanical ventilation                      **Protective Gloves:** Neoprene or rubber                      **Eye Protection:** Chemical splash goggles                      **Other Protective Equipment:** Protective clothing, barrier cream, eye bath, safety shower.

### 9. Special Precautions

**Precautions to be taken in handling and storing:** Store in dry area. Keep away from open flames and high temperatures.  
**Other precautions:** Minimize contact. Avoid breathing vapors. Practice good industrial hygiene and safe working practices.

### 13. Transportation Information and Regulatory Information

H.M.I.S. Codes:: Health - 2, Flammability - 3, Reactivity - 0

# MATERIAL SAFETY DATA SHEET

## 1. Product Information

Product Name: Novolac 555 Curing Agent  
Product Class: Epoxy Hardener Product Code: CG025-A

## 2. Composition/Information on Ingredients

Chemical Name	CAS Number	Weight Percent	Occup. Exposure Limits OSHA PEL ACGIH TLV	Vapor Pressure mm Hg and Temp. F
Cycloaliphatic Amine Hardeners	Mixture	65-70	Not established (N/E)	N/E
*Xylene	1330-20-7	12-15	100 ppm 100 ppm	5.1 68
Benzyl Alcohol	100-51-6	17-20	Not established 1.0 mg/m3 (STEL)	1 68

\*Indicates toxic chemical(s) subject to reporting requirements of Section 313 of Title III and of 40 CFR 372.

## 3. Physical Data

**Boiling Range (Deg. F):** 310°F **Vapor Density:** Heavier than air **Evaporation Rate:** Slower than Ether **Percent Volatile By Volume:** 15 **Weight Per Gallon (lbs.):** 8.2 ± .2

## 4. Fire and Explosion Hazard Data

**Flash Point (Deg.F):** 80°F **Lower Explosive Limit:** 1.0. **Extinguishing Media:** Foam, alcohol foam, CO2, dry chemical **OSHA Flammability Classification:** Flammable Liquid IC **Special Firefighting Procedures:** Wear a NIOSH/MSHA approved self contained breathing apparatus and full protective clothing. Use water to keep fire exposed containers cool. Water may be ineffective as an extinguishing agent. **Unusual Fire and Explosion Hazards:** Vapors are heavier than air and may travel along the ground or be moved by ventilation to ignition sources at locations distant from material handling point. Pressure may build up in containers and create an explosion hazard.

## 5. Health Hazard Data

**THIS PRODUCT IS FLAMMABLE.** **Effects of Overexposure:** **Eyes:** Irritation, burning, tearing and redness. **Skin:** Moderate irritation or defatting of skin upon prolonged or repeated contact. **Ingestion:** Abdominal pain, nausea, vomiting and diarrhea. **Inhalation:** Excessive exposure to vapors can cause headache, dizziness, uncoordination, nausea and loss of consciousness. **Emergency and First Aid Procedures:** **Eyes:** Flush with water for 15 minutes. **Skin:** Remove contaminated clothing, wash skin with soap and water. **Ingestion:** DO NOT induce vomiting. Get medical attention immediately. **Inhalation:** Move to fresh air, aid breathing if necessary. **In all cases, consult a physician for best treatment.** **Chemical listed as carcinogen or potential carcinogen:** NTP: No IARC: No OSHA: No

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**Stability:** Product Stable **Conditions to Avoid:** All sources of ignition **Incompatibility (Materials to avoid):** Oxidizing agents, strong acids and bases. **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, nitrogen oxides and organic compounds. **Hazardous Polymerization:** Will not occur.

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**Steps to be taken in case material is released or spilled:** Dike spill area. Absorb spill with inert absorbent material. Place in sealed metal containers for proper disposal. **Waste Disposal Method:** Dispose of in accordance with local, state and federal regulations.

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## 13. Transportation Information and Regulatory Information

H.M.I.S. Codes:: Health - 2, Flammability - 3, Reactivity - 0