

# MATERIAL SAFETY DATA SHEET

Prepared by: Technical Barrier Systems

Revision Date: December 1, 2008

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard.

All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**1. PRODUCT NAME: KELMAR® RESIN**

Chemical Family: Resin and diluents.

2. HAZARDOUS INGREDIENTS:	CASNO	EXPOSURE LIMITS*			CONTENT
		TLV	STEL	PEL	
Epoxy Resin	25068-36-6	None	None	None	75-90%
Terpineol (PO)	8000-41-7	None	None	None	5-15%
Phenol	108-95-2	5 ppm	10 ppm	5 ppm	< 4%

\*) Refer to Section 7 for available LD/LC(50) Health Hazard Data.

**3. PHYSICAL DATA:**

Boiling Point (°C):	Decomposes	Water/Oil Distribution
Percent Volatile:	ca.20	Coefficient: N/Av
Freezing Point (°C)	N/Av	Solubility in Water: None
Vapor Pressure mmHg @20(°C):	(PO) < 1	Specific Gravity: 1.12
Vapor Density:	> Air	pH: N/Av
Odor Threshold:	N/Av	Evaporation Rate: N/Av
Appearance:	Clear Liquid	Odor: Pine
N/Av = Not Available	N/Av = Not Available	ca. = Approximate

**4. FIRE AND EXPLOSION HAZARD DATA:** HMIS Hazard Rating No. 2 (Moderate)

**Flash Point:** 78°C (172°F)

Method: Tag C.C.

**Auto-Ignition Temp.:** Not Available

**Limited of Flammability:** LEL: Not Available UEL: Not Available

**Extinguishing Media:** Carbon dioxide, foam, dry chemical & water fog.

**Special Fire & Unusual Hazards:** At higher temperature vapors can cause pressure build up in sealed containers. Use water to cool containers exposed to fire. Self-contained respirator equipment and full protective clothing required when smoke or fumes are generated. Electrical grounding is not recommended.



**8. FIRST AID:**

**Inhalation:** Remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration, preferably mouth-to-mouth. Seek medical attention.

**Eyes:** Flush eyes with water, lifting upper and lower lids occasionally for 15 minutes. Seek medical attention.

**Skin:** Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash clothing before reuse.

**Ingestion:** Do NOT induce vomiting; give large quantities of water; get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do not give anything by mouth to an unconscious person.

**9. SPECIAL PROTECTION INFORMATION:**

**Ventilation:** Ventilation is recommended. Air movement must be designed to insure turnover at all locations in work area to avoid build up of heavy vapors.

**Personal Protection Equipment:** Do NOT wear contact lenses when working with this material. Use chemical goggles/safety glasses with side shields and Rubber/Latex gloves. Selection of specific items such as boots and apron will depend on operation. Wear respirator protection whenever airborne concentrations exceed TLV ceilings or TWA, use NIOSH/OSHA approved respirators equipped with an organic vapor cartridge for listed hazard.

Confined spaces, rooms, or tanks are areas where concern for TLV's is especially important. Reference OSHA Regulation CFR 29 1910.134 for recommended respiratory protection.

**10. ADDITIONAL INFORMATION:**

**Average Shelf Life:** Refer to Product Data Sheet.

**Special Instructions:** Store in cool, dry place.

**11. REGULATORY INFORMATION:**

**Title III Section 302:** CASRN 108-95-2 RQ: 1000 lbs.

**Title III Section 311/312:** Health hazard: Immediate  
Delayed  
Physical hazard: Fire

Title III Section 313: CASRN 108-95-2 < % 4

**State:** California No reportable materials.

**WHMIS Classification:** Class D, Div 2, Sub B

**Canadian Domestic Substance List:** All chemicals are listed.

**12. TRANSPORTATION**

**National Motor Freight Classification (NMFC):** 46030 Sub: - Class: 55

**Description:** RESIN COMPOUNDS

**Emergency Response Guide Page No.:** NOT APPLICABLE

**DOT Reportable Quantity:** 25,000 LBS

**Shipping Name:** NOT REGULATED - USE NMFC DESCRIPTION

Marine Pollutant: NL

(NL = Not Listed; P = Moderate; PP = Severe; ND = Not Determined)

The information herein is given in good faith. No warranty, expressed or implied, is given regarding the accuracy of these data or the results obtained from the use thereof. Consult Technical Barrier Systems Inc. for further information.

# MATERIAL SAFETY DATA SHEET

Prepared by: Technical Barrier Systems

Revision Date: February 1, 2010

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard.

All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 1. PRODUCT NAME: **KELMAR® HARDENER**

Chemical Family: Coal tar and amine mixture.

2. HAZARDOUS INGREDIENTS:	CASNO	EXPOSURE LIMITS*			CONTENT
		TLV	STEL	PEL	
Diethylenetriamine (DETA)	111-40-0	1ppm	NONE	1ppm	5-15%
Coal Tar	65996-89-6	NONE	NONE	NONE	75-90%

\*) Refer to Section 7 for available LD/LC(50) Health Hazard Data.

## 3. PHYSICAL DATA:

Boiling Point (°C):	(DETA) > 316	Water/Oil Distribution
Percent Volatile:	approx. 15	Coefficient: N/Av
Freezing Point (°C)	N/Av	Solubility in Water: ca. 10%
Vapor Pressure mmHg @20(°C):	>1 (DETA)	Specific Gravity: 1.14
Vapor Density:	> Air	pH: Alkaline
Odor Threshold:	N/Av	Evaporation Rate: N/Av
Appearance:	Black Liquid	Odor: Ammonical
N/Av = Not Available	N/Av = Not Available	ca. = Approximate

## 4. FIRE AND EXPLOSION HAZARD DATA: HMIS Hazard Rating No. 1 (Slight)

**Flash Point:** 99°C (210°F)

Method: Cleveland C.C

**Auto-Ignition Temp.:** Not Available

**Limited of Flammability:** LEL: 2.0% UEL: 6.7%

**Extinguishing Media:** Carbon dioxide, foam, dry chemical & water fog.

**Special Fire & Unusual Hazards:** At higher temperature vapors can cause pressure build up in sealed containers. Use water to cool containers exposed to fire. Self-contained respirator equipment and full protective clothing required when smoke or fumes are generated. Electrical grounding is not recommended.

5. **REACTIVITY DATA:** HMIS Hazard Rating No. 0 (Minimal)

**Stability:** Stable. Not sensitive to mechanical impact. Excessive heat, fumes and smoke can occur if this product is not mixed and used according to directions.

**Incompatibility:** Strong oxidizing agents, acids, isocyanates, and organic peroxides may result in violent explosive reaction.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen; aldehydes phenol various unknown hydrocarbons from incomplete combustion.

**Hazardous Polymerization:** Will not occur when handled per instructions.

6. **ENVIRONMENTAL AND DISPOSAL INFORMATION:**

**Action to Take For Spills/Leaks:** Ventilate area, eliminate all sources of ignition. Wear appropriate protective gear, contain leak or spill, salvage, clean up residue with absorbent material. Wash down area with water or diluted acetic acid.

**Waster Disposal Method:** Handle disposal of waste material in manner which complies with local, state, province and federal regulation. Incineration at agency approved waste-disposal facilities.

7. **HEALTH HAZARD DATA:** HMIS Hazard Rating No. 2 (Moderate)

**PRIMARY ROUTE OF ENTRY:** Inhalation, Dermal, Eyes, Ingestion

Effect of Overexposure

**Inhalation:** Vapours can be irritating to nose and mucous membranes.

**Eyes:** Contact can cause severe irritation, redness, tearing and blurred vision.

**Skin Contact:** Short single exposure may cause moderate irritation to mild burn. Prolonged or repeated exposure may cause severe burns and blisters. This material may result in an allergic type reaction or sensitization response in some individuals.

**Skin Absorption:** Moderate increase in overall toxicity from absorption through skin.

LD(50) Dermal      CASRN      111-40-0      1090 mg/kg Rabbit.

**Ingestion:** Intake can cause gastrointestinal irritation, nausea, vomiting, diarrhea, headache, and drowsiness. Can result in burns of mouth, esophagus and stomach.

LD(50) Oral      CASRN      111-40-0      1080 mg/kg Rat.

**Chronic:** Product does not contain carcinogenic materials as defined by OSHA Hazardous Communications Act 1910.1200. Materials are not known mutagenic, teratogenic, or reproductive health hazards. Coal tar epoxy coating applications do not generate high levels of fumes compared to hot application of coal tar. Test data from HOT applications like roofing

repairs have reported coal tar pitch volatiles as carcinogenic in humans by skin, and inhalation exposure.

**8. FIRST AID:**

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- Eyes:** Flush eyes with water lifting upper and lower lids occasionally for 15 minutes. Seek medical attention.
- Skin:** Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash clothing before reuse.
- Ingestion:** Do NOT induce vomiting; give large quantities of water; get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do not give anything by mouth to an unconscious person.

**9. SPECIAL PROTECTION INFORMATION:**

**Ventilation:** Ventilation is recommended. Air movement must be designed to insure turnover at all locations in work area to avoid build up of heavy vapors.

**Personal Protection Equipment:** Do NOT wear contact lenses when working with this material. Use chemical goggles/safety glasses with side shields and Rubber/Latex gloves. Selection of specific items such as boots and apron will depend on operation. Wear respirator protection whenever airborne concentrations exceed TLV ceilings or TWA, use NIOSH/OSHA approved respirators equipped with an organic vapor cartridge for listed hazard.

**10. ADDITIONAL INFORMATION:**

- Average Shelf Life:** Refer to Product Data Sheet.
- Special Instructions:** Store in cool, dry place.

**11. REGULATORY INFORMATION:**

- Title III Section 302:** No reportable materials.
- |                                   |                  |           |
|-----------------------------------|------------------|-----------|
| <b>Title III Section 311/312:</b> | Health hazard:   | Immediate |
|                                   |                  | Delayed   |
|                                   | Physical hazard: | None      |
- Title III Section 313:** No reportable materials.
- State:** California No reportable materials.
- WHMIS Classification:** Class D, Div 2, Sub A, Class E

**12. TRANSPORTATION**

**National Motor Freight Classification (NMFC):** 33880 Sub: 2 Class: 55

**Description:** REGULATED - USE DOT PROPER SHIPPING NAME

**Emergency Response Guide Page No.:** 60

**DOT Reportable Quantity:** NOT APPLICABLE

Shipping Name: CORROSIVE LIQUIDS, N.O.S.  
UNNO: UN 1760 TDGCD: 8 Package Group: III  
Contains: DIETHYLENETRIAMINE  
Label: CORROSIVE Sub-Label: NONE

Marine Pollutant: NL  
(NL = Not Listed; P = Moderate; PP = Severe; ND = Not Determined)

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