

**MATERIAL SAFETY DATA SHEET**  
ChemCo Systems, Inc., 2800 Bay Road, Redwood City, CA 94063  
Prepared by Dept. of Safety, Phone: 650/261-3790  
24 Hour Emergency Phone: 800/424-9300 CHEMTREC

1. PRODUCT NAME:

**KEMKO® 132, Polyurea Binder, Part B**

Chemical Family: Amine blend

2. HAZARDOUS INGREDIENTS

| NAME                                 | CAS No.    | TLV | STEL | PEL | CONTENT |
|--------------------------------------|------------|-----|------|-----|---------|
| N,N-dialkylphenylene diamine         | 101-96-2   | N/E | N/E  | N/E | 5-10%   |
| N,N-dialkyldiphenyl methane          | 5285-60-9  | N/E | N/E  | N/E | 10-15%  |
| Glyceryl-poly(oxypropylene) triamine | 6485-22-28 | N/E | N/E  | N/E | 5-10%   |

N/E: Not Established

Other ingredients are nonhazardous as defined in 29 CFR 1910.1200

reference section 7, Health Hazard Data for LD (50)

3. PHYSICAL DATA:

|                      |                      |                                     |            |
|----------------------|----------------------|-------------------------------------|------------|
| Boiling Point:       | > 300 F              | Water/Oil Distribution Coefficient: | N/D        |
| Percent Volatile:    | negligible           | Solubility in Water:                | negligible |
| Freezing Point       | N/D                  | Specific Gravity:                   | 1.0        |
| Vapor Pressure@ 20C: | < .1mm Hg            | pH:                                 | alkaline   |
| Vapor Density        | N/D                  | Evaporation Rate:                   | N/D        |
| Odor Threshold       | N/D                  | Odor                                | Ammoniacal |
| Appearance           | Reddish brown liquid |                                     |            |

N/D = Not Determined

4. FIRE AND EXPLOSION HAZARD DATA:

|                            |                           |
|----------------------------|---------------------------|
| HMIS Hazard rating:        | 1 - (Slight Hazard)       |
| Flash Point:               | > 200 F (PMCC)            |
| Auto Ignition Temperature: | N/D                       |
| Limits of Flammability:    | LEL: Unknown UEL: Unknown |

EXTINGUISHING MEDIA:

CARBON DIOXIDE, FOAM, DRY CHEMICAL & WATER FOG

SPECIAL FIRE & UNUSUAL HAZARDS:

Self-contained respirator equipment and full protective clothing are required when smoke and fumes are generated. Fire may produce irritating and poisonous fumes such as carbon monoxide and nitrous oxides. Electrical grounding is not recommended.

5. REACTIVITY DATA:

HMIS Reactivity Rating: 1 - (Slight Hazard)

STABILITY: Stable. This product must be mixed with another component to react. Not sensitive to mechanical impact.

INCOMPATIBILITY: Strong oxidizing agents, acids, epoxy resins, isocyanates, and organic peroxides may result in violent reaction.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and dioxide, nitrogen oxides, aldehydes and various hydrocarbons from incomplete combustion.

HAZARDOUS POLYMERIZATION: Will not occur unless product is mixed with epoxy resins, isocyanates or urethane prepolymers.

6. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS AND LEAKS: Ventilate area. Wear appropriate protective gear. Contain leak/spill. Salvage. Clean up residue with absorbent material. Wash down area with water and diluted acetic acid.

WASTE DISPOSAL METHOD: Handle disposal of waste material including contaminated absorbent material and material from spill cleanup procedures in manner which complies with local, state, province, and federal regulations. Landfill or incineration at agency approved waste-disposal facility are recommended.

7. HEALTH HAZARD DATA:

HMIS Hazard Rating: 3 - (Serious Hazard)  
Primary Route Of Entry: Dermal, Inhalation

Effects of Overexposure:

Inhalation: Due to low vapor pressure of this product, fumes will be minimal below 90F. At higher temperatures, fumes will be irritating.

Eyes: Contact can cause severe burns, irritation, redness, tearing or blurred vision.

Skin Contact:

Short single exposure may cause moderate irritation to mild burn. Prolonged or repeated exposure may cause a severe burn. May result in an allergic reaction. Skin sensitizer. Draize skin score fro 24 hour contact, 2.8.

Ingestion:

Moderately toxic by ingestion.  
Oral LD(50) 5285-60-9 1.4 g/kg (rat).

Chronic:

None known.

8: FIRST AID:

Eyes:

Flush eyes with water and/or 1% boric acid, lifting upper and lower lids occasionally for 30 minutes. Seek prompt medical attention.

Skin:

Apply generous amount of waterless hand cleaner to affected area. Rub briskly and remove with clean paper towel or rag. Repeat process. Then wash skin with mild soap and rinse with water for at least 15 minutes. Remove contaminated clothing and wash. Destroy contaminated leather goods. Seek medical attention if irritation persists.

Ingestion:

Do not induce vomiting. 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.

Inhalation:

Remove victim from exposure. If difficulty with breathing; administer oxygen and seek immediate medical assistance.

9. SPECIAL PROTECTION INFORMATION:

Ventilation:

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

Personal Protection:

Use chemical goggles and face shield if splashing is anticipated. Wear gloves. Selection of other specific items will depend on the operation. Wear respirator protection whenever airborne concentrations exceed TLV ceilings or TWA. Use NIOSH approved respirators 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:

DOT Proper Shipping Name:

Polyamines, liquid, corrosive, n.o.s.  
(N,N'-dialkylphenylenediamine mixture)

DOT Hazard Class or Division:

8

Identification Number:

UN 2735

Packing group:

III

Labels Required:

Corrosive

WHMIS Classification:

Class D, Div.2, Sub. A&B

WHMIS Labeling:

Test tube, hand

Shelf life:

18 months, minimum

Special Instructions:

Storage recommendations: Store at room temperature. Do not allow to freeze.

**The information given herein is given in good faith. No warranty expressed or implied is made regarding the accuracy of these data or the results obtained from the use thereof. All materials may present unknown health hazards and must be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Consult ChemCo Systems, Inc. for further information.**

**MSDS132B 7/99**