



HK100-B
Material Safety Data Sheet

Section I Product and Company Identification

Manufacturer	Zyvex Performance Materials
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Emergency	Chemtrec (North America): 800.424.9300 Chemtrec (International): 703.527.3887
Email	safety@zyvexpro.com
Product Name	HK1000-B
Chemical Name	Mixture of Amines
Issue Date	August 1, 2009

Section II Physical/Chemical Characteristics

Appearance/Odor	Clear free flowing liquid with ammonia like odor
Solubility in water	< 10%
Specific gravity	<1.0
Vapor pressure	Not Available
Vapor density	>1
Evaporation rate	Not available
Boiling point	> 260°C (500°F)
Freezing point	Not available

Section III Hazardous Ingredients

Substance	CAS Number	OSHA PEL	Carcinogenicity Classification	Wt %
Polyoxypropylenediamine	9046-10-0	None Established	Not Listed	≤40
Polymer Solids	68683-29-4	None Established	Not Listed	≤25
Glyceryl poly(oxypropylene)triamine	64852-22-8	None Established	Not Listed	≤10 - 20

Aminoethyl piperizine	140-31-8	None Established	Not Listed	≤10 - 15
Nonyl Phenol	25154-52-3	None Established	Not Listed	≤10 - 15
Triethanolamine	102-71-6	5 mg/m ³ (ACGIH)	IARC 3	≤1 - 5

Section IV Fire and Explosion Hazard Data

Flash Point	194° F (Based on lowest flashpoint of the mixture)
Explosion Limits	N/A
Extinguishing Media	Use alcohol resistant foam, dry chemical, dry sand or carbon dioxide.
Special Fire Fighting Procedures	May generate ammonia gas during combustion of certain components. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run off from fire fighting to enter drains or water courses. Do not enter fire area without full bunker gear, including positive pressure NIOSH self-contained breathing apparatus. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.
Unusual Fire and Explosion Hazards	Material will not burn unless preheated.

Section V Reactivity Data

Stability	Stable under normal use conditions.
Incompatibility	Can react vigorously with strong oxidizing or reducing agents. Avoid contact with water or liquids. Do not allow product to contact water or other liquids. This can cause violent eruptions, splatter hot material, or ignite flammable material.
Decomposition	Thermal decomposition may produce carbon monoxide, carbon dioxide, ammonia and or oxides of nitrogen.
Hazardous Polymerization	Will not occur.
Conditions to avoid	Avoid high temperatures.

Section VI Health Hazard Data

Toxicity	Health hazard tests have not been run on this mixture by Zyvex Performance Products. Information in this section is based on the health hazards of the individual components of the mixture.* Toxicity tests have not been performed on Zyvex Performance Materials products. Treat with caution.
Eye	May cause irritation to the eyes.
Skin	May cause irritation to the skin
Ingestion	May cause gastrointestinal irritation and diarrhea.
Inhalation	Amine vapors generated in fires may be irritating to the respiratory tract
Conditions aggravated by exposure	Product should be treated as a hazard. Existing skin and pulmonary diseases may be aggravated by skin or inhalation exposure.

Section VII First Aid Measures

Eye	Flush with large amounts of water for at least 15 minutes, lifting the eyelids to separate them. Do not rub eyes or keep them closed. Seek medical assistance immediately.
Skin	Immediately wash with large amounts of soap and water, remove contaminated clothing, and seek medical assistance if needed. In case of contact with hot product, immediately flood the affected area with cold water. Wipe excess material from exposed area. Flush exposed skin with water and follow by washing with soap if available. Carefully remove clothing; if clothing is stuck to a burn area do not pull it off, but cut around it. Cover burn area with a clean material. Transport to nearest medical facility for additional treatment.
Ingestion	Do not induce vomiting. Be sure person does not aspirate into lungs. Seek medical assistance immediately.
Inhalation	Remove to fresh air immediately and give oxygen if breathing is difficult. Get medical assistance. If not breathing, give artificial respiration.

Section VIII Precautions for Safe Handling and Use

Material Escape or Spills	Eliminate sources of ignition. Ventilate area. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures: Dike and contain. Avoid runoff into waterway and ground penetration. Absorb with inert material (i.e., clay or sand) and place into chemical solid waste container. Dispose of properly.
Waste Disposal	Dispose in accordance with applicable laws.
Handling	Use Personal Protective Equipment (see IX) and proper ventilation.
Storage	Store in cool, dark, dry place with adequate ventilation. Keep away from ignition sources and high temperatures.

Section IX	Control Measures
Personal Protective Equipment (PPE)	<p>Adequate ventilation should be provided while working with this product.</p> <p>Avoid contact with skin. Protect hands with chemical resistant butyl rubber gloves when handling. Wear lab coat or other protective clothing. Remove and wash contaminated clothing upon exposure.</p> <p>Wear chemical safety goggles and full face shield if splashing is possible.</p> <p>Wear respiratory protection if the material is heated to a temperature where vapors will be released.</p>
Chemical Hygiene	Wash hands with soap and water after handling material to minimize the spread of undetected skin contamination. All applicable laboratory safety guidelines should be followed when using this material.

Section X Transportation Measures

DOT Proper Shipping Name	Amine, liquid, corrosive, n.o.s. (polyoxypropylene diamine, Aminoethyl piperazine)
DOT Hazard Class	Class 8 Corrosive material
Identification Number	UN 2735
Packaging Group	III

Section XI Special Precautions

<p>This information is provided in good faith and is believed to be correct. Zyvex Performance Materials; however, makes no representation as to the comprehensiveness or accuracy of this information. Final determination of the suitability of this product and its safe use is the sole responsibility of the user. Accordingly, Zyvex Performance Materials will not be responsible for damages of any kind resulting from the use of or reliance upon the provided information.</p>
