

## Material Safety Data Sheet

Reference Number C1-082c  
Preparation Date: October 9, 2002

### 1. Manufacturer's Name and Contact Information

Product Name: KBK E396A (Main Component)  
Company Name: Nippon NSC  
Address: 1-6-5 Senbanishi Minoo-shi Osaka  
Department: Industrial Science Headquarters Safety and Certification Division  
Telephone: 0727-28-1719  
FAX: 0724-28-3519  
Developer: Research and Development  
Telephone: 0727-28-1701

### 2. Composition / Information on Ingredients

Pure / Compound: Compound  
Chemical Name: Epoxy Resin Solution  
Hazardous Ingredients:

Ingredient	Content (%)	Control #
Bisphenol A Epoxy Resin	30%	(7)-1283

### 3. Hazards Identification

Classification: Classified as "other" health hazard.  
Flammability: Mixing with a large amount of hardening agent will result in a rapid increase in temperature.  
Toxicity: Skin and eye irritant. Skin sensitizer. Identified as a mutagen.

### 4. First Aid Measures

Inhalation: If itchiness or irritation develops from inhaling fumes produced by heating or mixing with a hardening agent, seek medical attention.  
Skin Contact: Remove material from skin. Wash thoroughly with water and a pH neutral soap. Seek medical attention if itchiness or irritation develops.  
Eye Contact: Flush eyes with water for at least 15 minutes. Seek medical attention for any abnormality.  
Ingestion: Do not induce vomiting and seek medical attention. Do not give anything orally to unconscious victims.

### 5. Fire Fighting Measures

Extinguishing Media: Water, foam, powder, CO<sub>2</sub> gas, sand, or related media.  
Extinguishing Methods: Work at the base of the fire using an approved extinguishing media. Quickly remove other combustible materials to a safe location. If removal is not a possibility, use water to keep containers cool.  
Protective Gear: Wear protective goggles and clothing. Wear a respirator if necessary.

### 6. Accidental Release Measures

Soak up spills with sand, rags, or other absorbent material. Place in a sealed container.

### 7. Handling and Storage

Handling: To prevent ignition, avoid high temperatures, sparks, and strong oxidizers. When finished handling material, thoroughly wash hands and gargle. Take measures to avoid inhalation and contact with eyes, skin, and clothing. Provide adequate ventilation in work areas. Avoid spills, overflows, and unnecessary evaporation. Take measures to prevent static electricity build up by wearing conductive clothing and footwear. Do not topple, drop, drag, or handle containers in a rough manner.  
Storage: Take measures to prevent sparking in electrical devices in the storage areas. Keep storage containers tightly sealed to prevent contact with air. Avoid direct sunlight. Store in a cool and dark place.

Other: Obey all applicable work-safety and fire regulations.

---

### 8. Exposure Controls / Personal Protection

Exposure Limits: Not established.  
Facilities: Provide adequate ventilation for work areas. Keep containers closed when not in use. Provide well-marked safety showers, sinks, and eye wash stations near work areas.  
Equipment: Masks approved for organic gases, respirators, protective gloves, goggles, clothing, and footwear.

---

### 9. Physical and Chemical Properties

Appearance: Transparent pale-yellow liquid.  
Odor: Strong offensive odor.  
Boiling Point: No data available.  
Melting Point: No data available.  
Solubility: Insoluble in water.  
Vapor Density: No data available.  
Vapor Pressure: No data available.  
Specific Gravity: 1.0 - 1.2

---

### 10. Stability and Reactivity

Flash Point: 196°C  
Flammability Limits: No data available.  
Auto ignition Temp.: No data available.  
Reactivity: Stable. Will produce heat and harden after mixing with a hardening agent such as ethylene amine. Store separately from oxidizers, strong acids, mercaptans, and bases. Contact with oxidizers (nitric acid, permanganic acid, chromic acid, etc) produces a violent reaction and may result in ignition. Contact with strong oxidizers may produce explosives peroxides.

---

### 11. Toxicological Information

Acute Toxicity: No data available at present.  
Skin Corrosive: Prolonged contact with skin may cause inflammation.  
Irritant: Eye contact may cause temporary irritation.  
Sensitizer: May act as a skin sensitizer.  
Mutagen: Liquid epoxy resin has been recognized as a mutagenic substance.  
Carcinogen: Current information indicates carcinogenetic properties.

---

### 12. Ecological Information

No data available at present.

---

### 13. Disposal Considerations

Dispose of with a licensed professional.

---

### 14. Transportation Information

Take measures to prevent toppling, dropping, and damaging containers during transportation. Obey all applicable regulations.

---

### 15. Regulatory Information

---

### 16. Other Information

Contact Information: See section 1.  
Please note that the safety information in this document may be incomplete. Use caution as all materials may present unknown health hazards.