

MATERIAL SAFETY DATA SHEET (E/S/10/02)

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SECTION I - IDENTIFICATION OF PRODUCT AND COMPANY:

PRODUCT IDENTIFIER: **LINING KOTE Base**

CHEMICAL TYPE: **Bisphenol-A Type Epoxy**

MANUFACTURER: **SUPERIOR PRODUCTS INT'L II, INC.**

ADDRESS: **10835 W. 78th St., Shawnee, KS 66214**

PRODUCT USE: **Tank and pipe lining**

EMERGENCY TELEPHONE NUMBER: **800/424-9300; 202/483-7616**

SECTION II - HAZARDOUS INGREDIENTS:

<u>HAZARDOUS INGREDIENTS</u>	<u>%</u>	<u>CAS/PIN</u>	<u>TLV</u>	<u>PEL</u>
Ethylene Glycol Propyl Ether	19.3	2807-30-9	50.00	50.00

SECTION III - HAZARD IDENTIFICATION:

The product is a flammable, solvent-based polyurethane and should be treated according to all known safety precautions. Refer to Section VII for Storage and Handling recommendations, Section VIII for Personal Protection, Section XIV for transport.

SECTION IV - FIRST AID MEASURES:

INHALATION: Remove to fresh air. Give oxygen if required. Seek medical help.

EYES: Flush w/clear lukewarm water for 15-20 minutes, occasionally lifting eyelids. See physician.

SKIN: Remove contaminated clothing. Wash affected areas & clothing w/mild soap & water.

INGESTION: Do not induce vomiting. Keep at rest. Get prompt medical attention.

SECTION V - FIREFIGHTING MEASURES:

CONDITIONS OF FLAMMABILITY: Spraying or other activities to create finely divided droplets around open flame/sparks

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, aldehydes, fumes

AUTOIGNITION TEMP.: >499C. degrees **FLASH POINT & METHOD:** 120F. TCC

FLAMMABLE LIMITS: (Lower) 1.3% **(Upper)** 15.8%

SENSITIVITY TO STATIC DISCHARGE? NAV

SENSITIVITY TO MECHANICAL IMPACT? NAV

SPECIAL PROCEDURES: Firefighters should wear full-body protection & SCBA

MEANS OF EXTINCTION: Foam, water spray (fog), dry chemical, carbon dioxide & vaporizing liquid type extinguishing agents

SECTION VI - ACCIDENTAL RELEASE MEASURES: Ventilate the area, control spill by covering w/sawdust or similar agent. Pour decontamination solution over spill (non-ionic surfactant Union Carbide's Tergitol TMN-10 (20%) + water (80%); avoid breathing vapors

SECTION VII - HANDLING AND STORAGE:

Storage Requirements: Maintain temperature between 32-122F. degrees; average shelf life is 12 months @ 77F. degrees. Empty containers may contain residual liquid or vapors, and should not be pressurized, cut, welded or exposed to ignition sources.

Handling Procedures/Equipment: Ground all containers; use non-sparking tools. Keep away from ignition sources as liquid contains volatiles that give off invisible vapors.

SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION:

Personal Protective Equipment: Half-face respirator w/organic vapor filter, safety glasses w/shields, PVA or nitrile chemical-resistant gloves, skin protection

Engineering Controls: Mechanical exhaust fans; use explosion proof equipment

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE AND ODOR: White liquid, glycol-ether type solvent odor

SOLUBILITY IN WATER: Partially soluble in water **VOLATILES:** 34.2%

FREEZING POINT: NAP **BOILING POINT:** >241F. deg. **pH:** NAP

SPECIFIC GRAVITY: 1.54 **ODOR THRESHOLD:** NAV

COEFF. WATER/OIL: NAV **EVAPORATION RATE:** 0.2%

VAPOUR DENSITY (Air = 1): 1.0+ **VAPOUR PRESSURE:** NAV

SECTION X - STABILITY AND REACTIVITY DATA:

CONDITIONS OF REACTIVITY: By high heat or fire

CHEMICAL INCOMPATIBILITY: Oxidizing materials, aminos, alcohols

CONDITIONS OF INSTABILITY: Stable, under normal conditions

HAZARDOUS DECOMPOSITION PRODUCTS: By high heat/fire--Carbon dioxide, carbon monoxide, fumes, smoke, aldehydes

CORROSIVE BEHAVIOR? NO

SECTION XI - TOXICOLOGICAL PROPERTIES:

ROUTES OF ENTRY:SKIN CONTACT **X** EYE CONTACT **X** INHALATION **X**

SYNERGISTIC PRODUCTS NAV **EXPOSURE LIMITS:** NAV

EFFECTS OF ACUTE EXPOSURE: Burning sensation on mucous membranes & respiratory tract. Flu-like symptoms (fever and chills); skin irritation

EFFECTS OF CHRONIC EXPOSURE: Chemical asthma - chest tightness, wheezing, coughing, shortness of breath. Can cause lung damage.

MUTAGENICITY: NAV

CARCINOGENICITY: NAV

IRRITANCY: Burning sensation

TERATOGENICITY: NAV

REPRODUCTIVE TOXICITY: NAV

SENSITIZATION: Can cause future reaction to lesser amounts

SECTION XII - ENVIRONMENTAL INFORMATION:

Air: 2.99 lbs./gallon V.O.C.

Water: Partially soluble

Soil: Lead- and chromate-free/not hazardous under RCRA 40CFR

SECTION XIII - WASTE DISPOSAL: Incineration preferred. Dispose of in accordance with federal, state and local government regulations.

SECTION XIV - TRANSPORT INFORMATION: Classified a hazardous material (Class 3//UN1263//P.G. III/F.P.=48C), and should be marked and handled according to specific regulations. Tariff code: 3208.90.0000

SECTION XV - REGULATORY INFORMATION: Materials listed under Superfund Amendments & Reauthorization Act of 1988 (SARA) Title III 302, 304, 311, 312, 313: Methyl Isobutyl Ketone (CAS 108-10-1), Toluol (CAS 108883)

SECTION XVI - OTHER INFORMATION: NAV

PREPARATION INFORMATION:

PREPARED BY: J. Pritchett, Superior Products Int'l II, Inc. DATE: 10/8/07

NAP = Not Applicable

NAV = Not Available

MATERIAL SAFETY DATA SHEET (E/S/10/02)

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SECTION I - IDENTIFICATION OF PRODUCT AND COMPANY:

PRODUCT IDENTIFIER: **LINING KOTE curing agent (2-part product)**

CHEMICAL TYPE: **Modified Amine Solution**

MANUFACTURER: **SUPERIOR PRODUCTS INT'L II, INC.**

ADDRESS: **10835 W. 78th St., Shawnee, KS 66214**

PRODUCT USE: **Tank and pipe lining**

EMERGENCY TELEPHONE NUMBER: **800/424-9300; 202/483-7616**

SECTION II - HAZARDOUS INGREDIENTS:

<u>HAZARDOUS INGREDIENTS</u>	<u>%</u>	<u>CAS/PIN</u>	<u>TLV</u>	<u>PEL</u>
n-Butanol	8.5	000071-36-3	150.00	150.00
Toluene	15.0	108-88-3	150.00	150.00
Xylene	25.5	1330-20-7	150.00	150.00

SECTION III - HAZARD IDENTIFICATION:

The product is a flammable, solvent-based polyurethane and should be treated according to all known safety precautions. Refer to Section VII for Storage and Handling recommendations, Section VIII for Personal Protection, Section XIV for transport.

SECTION IV - FIRST AID MEASURES:

INHALATION: Remove to fresh air. Give oxygen if required. Seek medical help.

EYES: Flush w/clear lukewarm water for 15-20 minutes, occasionally lifting eyelids. See physician.

SKIN: Remove contaminated clothing. Wash affected areas & clothing w/mild soap & water.

INGESTION: Do not induce vomiting. Keep at rest. Get prompt medical attention.

SECTION V - FIREFIGHTING MEASURES:

CONDITIONS OF FLAMMABILITY: Spraying or other activities to create finely divided droplets around open flame/sparks

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, aldehydes, fumes

AUTOIGNITION TEMP.: N/A **FLASH POINT & METHOD:** 45F. TCC

FLAMMABLE LIMITS: (Lower) 1% **(Upper)** 8%

SENSITIVITY TO STATIC DISCHARGE? NAV

SENSITIVITY TO MECHANICAL IMPACT? NAV

SPECIAL PROCEDURES: Firefighters should wear full-body protection & SCBA

MEANS OF EXTINCTION: Dry Chemical--monoammonium phosphate, potassium chloride, carbon dioxide, high expansion (protenic) chemical foam, water spray for large fires.

SECTION VI - ACCIDENTAL RELEASE MEASURES: Ventilate the area, control spill by covering w/sawdust or similar agent. Pour decontamination solution over spill (non-ionic surfactant Union Carbide's Tergitol TMN-10 (20%) + water (80%); avoid breathing vapors.

SECTION VII - HANDLING AND STORAGE:

Storage Requirements: Maintain temperature between 32-122F. degrees; average shelf life is 12 months @ 77F. degrees. Empty containers may contain residual liquid or vapors, and should not be pressurized, cut, welded or exposed to ignition sources.

Handling Procedures/Equipment: Ground all containers; use non-sparking tools. Keep away from ignition sources as liquid contains volatiles that give off invisible vapors

SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION:

Personal Protective Equipment: Half-face respirator w/organic vapor filter, safety glasses w/shields, PVA or nitrile chemical-resistant gloves, skin protection

Engineering Controls: Mechanical exhaust fans; use explosion proof equipment

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE AND ODOR: Amber-clear liquid, aromatic-solvent odor

SOLUBILITY IN WATER: Partially soluble

FREEZING POINT: NAP **BOILING POINT:** N/A **VOLATILES:** 56.8%

SPECIFIC GRAVITY: .99 **ODOR THRESHOLD:** NAV

COEFF. WATER/OIL: NAV **EVAPORATION RATE:** 1.4

VAPOUR DENSITY (Air = 1): 1.0 **VAPOUR PRESSURE:** NAV **pH:** NAP

SECTION X - STABILITY AND REACTIVITY DATA:

CONDITIONS OF REACTIVITY: By high heat or fire

CHEMICAL INCOMPATIBILITY: Oxidizing materials, amines, alcohols

CONDITIONS OF INSTABILITY: Stable, under normal conditions; unstable if contacted with water

HAZARDOUS DECOMPOSITION PRODUCTS: By high heat/fire--Carbon dioxide, carbon monoxide, fumes, smoke, aldehydes

CORROSIVE BEHAVIOR? NO

SECTION XI - TOXICOLOGICAL PROPERTIES:

ROUTES OF ENTRY:SKIN CONTACT X EYE CONTACT X INHALATION X

SYNERGISTIC PRODUCTS NAV **EXPOSURE LIMITS:** NAV

EFFECTS OF ACUTE EXPOSURE: Burning sensation on mucous membranes & respiratory tract. Flu-like symptoms (fever and chills); skin irritation

EFFECTS OF CHRONIC EXPOSURE: Chemical asthma - chest tightness, wheezing, coughing, shortness of breath. Can cause lung damage.

MUTAGENICITY: NAV

CARCINOGENICITY: NAV

IRRITANCY: Burning sensation

TERATOGENICITY: NAV

REPRODUCTIVE TOXICITY: NAV

SENSITIZATION: Can cause future reaction to lesser amounts

SECTION XII - ENVIRONMENTAL INFORMATION:

Air: 4.02 lbs./gallon V.O.C.

Water: Partially soluble

Soil: Lead- and chromate-free/not hazardous under RCRA 40CFR

SECTION XIII - WASTE DISPOSAL: Incineration preferred. Dispose of in accordance with federal, state and local government regulations.

SECTION XIV - TRANSPORT INFORMATION: Classified a hazardous material (Class 3//UN1263//P.G. II/F.P.=8C), and should be marked and handled according to specific regulations. Tariff code: 3208.90.0000

SECTION XV - REGULATORY INFORMATION: Materials listed under Superfund Amendments & Reauthorization Act of 1988 (SARA) Title III 302, 304, 311, 312, 313: Methyl Isobutyl Ketone (CAS 108-10-1), Toluol (CAS 108883)

SECTION XVI - OTHER INFORMATION: NAV

PREPARATION INFORMATION:

PREPARED BY: J. Pritchett, Superior Products Int'l II, Inc. DATE: 10/8/07

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