

Material Safety Data Sheet

Material Name: **KOSTER VAP I[®] 2000 FS Part A**

*** Section 1 – Chemical Product and Company Identification ***

Product Use: Epoxy primer

Manufacturer Information

KOSTER American Corp.

Phone: 1-757-425-1206

2585 Aviator Drive

Virginia Beach, VA 23453

Emergency # INFOTRAC: 1-800-535-5053

Section 1 Notes: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

*** Section 2 – Composition / Information on Ingredients ***

CAS #	PEL	Component	Percent
25068-38-6	No Data	Bisphenol A – (epichlorohydrin), reaction product	20 – 30
28064-14-4	No Data	Bisphenol F – (epichlorohydrin), reaction product	60 – 70

Section 2 Notes: This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). Nothing in this product is listed as a carcinogen by OSHA, NTP, IARC, or ACGIH.

*** Section 3 – Hazards Identification ***

Emergency Overview

This product is a barely combustible liquid preparation based on epoxy resin. This product is used as half of a two part system. This product is harmful by inhalation and if swallowed. Contact with this material will cause irritation to the skin, eyes and mucous membranes. This product may cause allergic skin reaction.

Routes of Entry:

EYES: This product may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production with marked redness and swelling of the conjunctiva.

SKIN: This product is irritating to the skin. This product may cause an allergic skin reaction in some individuals.

INGESTION: Ingestion of this product may cause nausea, vomiting and diarrhea.

INHALATION: This product is harmful by inhalation. Inhalation of vapors or mists may be irritating to the respiratory system.

HMIS Ratings: Health: 2 Fire: 1 Reactivity: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 4 – First Aid Measures ***

Eyes: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses. Seek medical attention at once.

Skin: Remove all contaminated clothing. Wash affected area with mild soap and water. If irritation persists, get medical attention. Wash contaminated clothing before reuse.

Ingestion: If the material is swallowed, have victim drink water to dilute stomach contents, and get immediate medical attention or advice – DO NOT INDUCE VOMITING.

Inhalation: Remove victim to fresh air. Seek medical attention if symptoms persist.

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Material Name: **KOSTER VAP I[®] 2000 FS Part A**

*** Section 5 – Fire Fighting Measures ***

Explosive limits in air: LEL: Not available; UEL: Not available

Flash Point: approx. 194° F / 90° C; **Method Used:** TAG

Auto Ignition Temperature: approx. 906° F / 485° C

Protection: Wear full firefighting turn-out gear and positive pressure SCBA.

Extinguishing Media: Dry chemical, carbon dioxide, and foam.

Special Fire Fighting Procedures: Use water spray to cool fire exposed containers.

Unusual Fire and Explosion Hazards: Containers may burst/explode at elevated temperatures. Product may form explosive vapors if heated to elevated temperatures. Invisible vapors can travel to source of ignition and flash back.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, hydrocarbon fragments

*** Section 6 – Accidental Release Measures ***

Isolate area. Dike large spills and prevent product from contaminating soil or from entering sewage and drainage systems and bodies of water.

Do not allow contact with skin, eyes or mucous membranes. Avoid inhalation of spilled material.

Wear appropriate protective equipment and clothing during clean up. Eliminate all ignition sources.

Absorb spills with inert material and transfer to closed containers for proper disposal.

*** Section 7 – Handling and Storage ***

Do not get this material in your eyes, on your skin or on your clothing. Do not inhale vapors or mists of this product. Do not reuse the empty container. Use this product with adequate ventilation. Wash hands after handling. Keep this product from heat, sparks, or open flame. Do not eat, drink or smoke when using this product.

Store only in the original container. Store tightly closed in an upright position in a cool, dry, well-ventilated area.

*** Section 8 – Exposure Controls / Personal Protection ***

Engineering Controls: If general mechanical ventilation is insufficient, use local exhaust, especially in enclosed work areas.

Respiratory Protection: If ventilation is not sufficient to effectively prevent buildup of vapors, provide appropriate NIOSH respiratory protection for organic vapors.

Eye Protection: Wear chemical splash goggles

Skin Protection: Use impervious gloves (neoprene). Wear work clothing sufficient to prevent skin contact, such as coveralls and long sleeves.

Other Protective Equipment: Know the locations of eyewash fountains and emergency showers.

*** Section 9 – Physical & Chemical Properties ***

Appearance: Clear / slight yellow

Odor: Aromatic

Physical State: Viscous liquid

pH as supplied: Not applicable

Boiling Point: 338°F / 170°C

Melting Point: Not applicable, tends to crystallize partially if kept below 50°F / 10°C

Freezing Point: Not applicable

Vapor Pressure: 0.5 (mm Hg) @ 68°F / 100 Pa @ 20°C

Specific Gravity (water=1): 1.1 @ 68°F / 20°C

Evaporation Rate: Not applicable

Solubility in Water: Insoluble

Percent Solids per weight: >99 (cured product)

VOC: No data

Viscosity: 1000 mPa's @ 68°F / 20°C

*** Section 10 – Stability & Reactivity ***

Chemical Stability: Stable under normal conditions

Conditions to Avoid: Keep away from heat, ignition sources and incompatible materials.

Incompatibility: This product may react with oxidizers and alkalis at elevated temperature.

Hazardous Decomposition: Not applicable. Stable under normal conditions of use.

Hazardous Polymerization: Will not occur

Material Safety Data Sheet

Material Name: **KOSTER VAP I[®] 2000 FS Part A**

*** Section 11 – Toxicological Information ***

General Product Information: Product contains epoxy derivatives, which may cause allergic skin sensitization in some individuals.

Bisphenol A – (epichlorohydrin), reaction product: LD 50, oral, rat: >2000 mg/kg

Bisphenol F – (epichlorohydrin), reaction product: LD 50, oral, rat: >2000 mg/kg

Repeated contact with the product may irritate skin and lead to dermatitis.

*** Section 12 – Ecological Information ***

Ecotoxicological Information:

Bisphenol A- (epichlorohydrin), reaction product:

LC 50 (trout): 3.6 mg/L (96 h)

EC 50 (Daphnia magna) 2.8 mg/L (48 h)

Environmental Fate: Harmful to aquatic systems. Keep liquid from entering sewers and natural waterways.

Bisphenol A- (epichlorohydrin), reaction product:

Closed Bottle Test (OECD 301D): 2–3% (28 d)

*** Section 13 – Disposal Considerations ***

Comply with all local, state, and federal regulations when disposing of this product.

*** Section 14 – Transportation Information ***

U.S. DOT Information: Not Regulated in containers of less than 119 gallons [49 CFR 150(f)].

*** Section 15 – Regulatory Information ***

All raw materials are on the U.S. EPA TSCA Inventory list.

Component analysis: Nothing in this product is subject to regulation under SARA 302, SARA 313, or CERCLA. The product may be subject to SARA 312 reporting, depending upon the purchaser's storage circumstances.

Acute Health: Yes **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

Check individual state and country requirements, as additional regulations may apply.

This product is not regulated as a Marine Pollutant / Environmentally Hazardous Substance (UN3082, Class 9) by US-DOT, but may be regulated as such in some countries.

*** Section 16 – Other Information ***

DISCLAIMER: Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty expresses or implied with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his particular use.

Material Safety Data Sheet

Material Name: **KOSTER VAP I[®] 2000 FS Part B**

*** Section 1 – Chemical Product and Company Identification ***

Product Use: Epoxy primer

Manufacturer Information

KOSTER American Corp.

Phone: 1-757-425-1206

2585 Aviator Drive

Virginia Beach, VA 23453

Emergency # INFOTRAC: 1-800-535-5053

Section 1 Notes: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

*** Section 2 – Composition / Information on Ingredients ***

CAS #	PEL	Component	Percent
144-55-0	No Data	1,3 – Benzenedimethaneamine	25 – 50

Section 2 Notes: This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). Nothing in this product is listed as a carcinogen by OSHA, NTP, IARC, or ACGIH.

*** Section 3 – Hazards Identification ***

Emergency Overview

This product is a corrosive yellowish liquid. This product is used as half of a two part system. This product is harmful by inhalation and if swallowed. Contact with this material will cause burns to the skin, eyes and mucous membranes. This product may cause allergic skin reaction.

Routes of Entry:

EYES: This product may cause eye burns. Symptoms may include discomfort or pain, excess blinking and tear production with marked redness and swelling of the conjunctiva.

SKIN: This product is irritating to the skin and may cause burns. This product may cause an allergic skin reaction.

INGESTION: This product may be harmful if swallowed..

INHALATION: This product is harmful by inhalation. Inhalation of vapors or mists of the product may be irritating to the respiratory system.

HMIS Ratings: Health: 3 Fire: 1 Reactivity: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 4 – First Aid Measures ***

Eyes: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses.

SEEK MEDICAL ATTENTION AT ONCE.

Skin: Remove all contaminated clothing. Wash affected area with mild soap and water. If irritation persists, get medical attention. Wash contaminated clothing before reuse.

Ingestion: If the material is swallowed, get immediate medical attention or advice – DO NOT INDUCE VOMITING.

Inhalation: Remove victim to fresh air. Seek medical attention if symptoms persist.

Material Safety Data Sheet

Material Name: **KOSTER VAP I[®] 2000 FS Part B**

*** Section 5 – Fire Fighting Measures ***

Flash Point: >194° F / 90° C **Method Used:** TAG

Auto Ignition Temperature: approx. 906° F / 485° C

Protection: Wear full fire fighting turn-out gear and positive pressure SCBA.

Extinguishing Media: Dry chemical, carbon dioxide, foam.

Special Fire Fighting Procedures: Use water spray to cool fire exposed containers.

Unusual Fire and Explosion Hazards: Containers may burst/explode at elevated temperatures. Product may form explosive vapors if heated to elevated temperatures. Invisible vapors can travel to source of ignition and flash back.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, hydrocarbon fragments, amine vapors, ammonia.

*** Section 6 – Accidental Release Measures ***

Isolate area. Dike large spills and prevent product from contaminating soil or from entering sewage and drainage systems and bodies of water.

Do not allow contact with skin, eyes or mucous membranes. Avoid inhalation of spilled material.

Wear appropriate protective equipment and clothing during clean up. Eliminate all ignition sources.

Absorb spills with inert material and transfer to closed containers for proper disposal.

*** Section 7 – Handling and Storage ***

Do not get this material in your eyes, on your skin or on your clothing. Do not inhale vapors or mists of this product. Do not reuse the empty container. Use this product with adequate ventilation. Wash hands after handling. Keep this product from heat, sparks, or open flame. Do not eat, drink or smoke when using this product.

Store only in the original container. Store tightly closed in an upright position in a cool, dry, well-ventilated area.

*** Section 8 – Exposure Controls / Personal Protection ***

Engineering Controls: If general mechanical ventilation is insufficient, use local exhaust, especially in enclosed work areas.

Respiratory Protection: If ventilation is not sufficient to effectively prevent buildup of vapors, provide appropriate NIOSH respiratory protection for organic vapors.

Eye Protection: Wear chemical splash goggles

Skin Protection: Use impervious gloves (neoprene). Wear work clothing sufficient to prevent skin contact, such as coveralls and long sleeves.

Other Protective Equipment: Know the locations of eyewash fountains and emergency showers.

*** Section 9 – Physical & Chemical Properties ***

Appearance: Clear yellowish

Odor: Ammonia

Physical State: liquid

pH as supplied: >12

Boiling Point: No information

Melting Point: Not applicable

Freezing Point: Not applicable

Vapor Pressure: No information

Specific Gravity (water=1): 1.1 @ 68°F / 20°C

Evaporation Rate: No information

Solubility in Water: Insoluble

Percent Solids per weight: No information

Viscosity: 1000 mPa's @ 68°F / 20°C

*** Section 10 – Stability & Reactivity ***

Chemical Stability: Stable under normal conditions

Conditions to Avoid: Keep away from heat, ignition sources and incompatible materials.

Incompatibility: This product may react with water, oxidizers, epoxies and isocyanates.

Hazardous Decomposition: Not applicable. Stable under normal conditions of use.

Hazardous Polymerization: Will not occur.

Material Safety Data Sheet

Material Name: **KOSTER VAP I[®] 2000 FS Part B**

***** Section 11 – Toxicological Information *****

General Product Information: Product contains an amine, which may cause allergic skin sensitization in some individuals.

1,3-Benzenedimethaneamine: LD50, oral, rat: 1040 mg/kg; LC50, inhalation, rat: 2.4 mg/L

Repeated contact with product may burn skin and lead to dermatitis. Contact with eyes will cause burns and corneal injury.

***** Section 12 – Ecological Information *****

Ecotoxicological Information: No data available for this product.

Environmental Fate: Harmful to aquatic systems. Keep liquid from entering sewers and natural waterways.

***** Section 13 – Disposal Considerations *****

Comply with all local, state, and federal regulations when disposing of this product. Waste product, as shipped, may be subject to RCRA regulations, waste code D002 (corrosive).

***** Section 14 – Transportation Information *****

US DOT Information

Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (1,3 – Benzenedimethaneamine)

Hazard Class: 8

ID Number: UN 2735

Packing Group: II

Required Label(s): Corrosive

***** Section 15 – Regulatory Information *****

All raw materials are on the U.S. EPA TSCA Inventory list.

Component analysis: Nothing in this product is subject to regulation under SARA 302, SARA 313, or CERCLA. The product may be subject to SARA 312 reporting, depending upon the purchaser's storage circumstances.

Acute Health: Yes **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

Check individual state and country requirements, as additional regulations may apply.

***** Section 16 – Other Information *****

DISCLAIMER: Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty expresses or implied with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his particular use.