

SAFETY DATA SHEET

SECTION 1: Identification



ShieldKote Hardener

(1a) Product Identifier:

Product Name : ShieldKote Hardener

(1b) Other means of identification:

Generic Name or Description : Epoxy Coating

(1c) Recommended use of the chemical and restrictions on use:

Please read label for appropriate directions for use.

(1d) Name, address, and telephone number of responsible party:

Company : KoreKote
Address : 889 Guy Paine Road
Macon, GA 31206
Telephone : +1.800.659.8270

(1e) Emergency phone number:

IN CASE OF EMERGENCY:

Call CHEMTREC at 1.800.424.9300

Contact only in case of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

SECTION 2: Hazard Identification

(2a) Classification of the chemical:

Health Hazards : Skin Corrosion, category 1
Eye Damage, category 1
Sensitization - Skin, category 1
Acute Toxicity - Oral, category 4

Physical Hazards :

(2b) Labeling Elements:

Hazard Pictograms :



Signal Word : **DANGER**
Hazard Statement(s) : Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Harmful if swallowed.

Precautionary Statement(s)

- Prevention : Do not breathe dusts or mists.
Wash hands and exposed skin thoroughly after handling.
Wear protective gloves and eye protection.
Contaminated work clothing must not be allowed out of the workplace.
- Response : Do not eat, drink or smoke when using this product.
: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CONTROL CENTER if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.
Specific treatment (see FIRST AID section on this label).
- Storage : Store locked up.
- Disposal : Dispose of container in accordance with local regulations.

*Note: Labeling elements found on the SDS may be different from actual hazards listed on product label. Safety Data Sheets are regulated by OSHA (29 CFR, 1910.1200 (Hazard Communication)) while the actual product and product label may be regulated by a different government entity. Please contact the responsible party (as listed in Section 1) if you have any questions.

(2c) Hazards not otherwise classified:

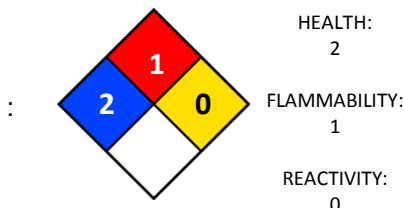
None

(2d) Unknown acute toxicity components:

0% of the mixture consists of ingredients of unknown acute toxicity

(2e) NFPA & HMIS Ratings:

NFPA
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme (Scale 0-4))



HMIS® III
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme (Scale 0-4))

:

HEALTH	1
FLAMMABILITY	2
PHYSICAL HAZARD	0

SECTION 3: Composition and Information on Ingredients

(3a) Disclosure of Ingredients:

Chemical Name:	Identifier (CAS No.):	Concentration:
Isophorone Diamine	n/a	15-40%
Benzyl Alcohol	n/a	15-40%
1, 3-Benzenedimethanamine	n/a	15-40%

(3b) Trade Secret Claim & Notes:

- Trade Secret Claim : When applicable, the specific concentration of each hazardous ingredient is considered a TRADE SECRET. Chemical names and identifiers are released to ensure that each user has entitlements of "right to know" and concentration ranges are selected to ensure that the appropriate hazard classification applies to the mixture. Ingredients not subject to Trade Secret claims are listed at an exact concentration. For more information please contact the responsible party as listed in Section 1.
- Notes : This product may contain other ingredients that are not required to be disclosed on the label or safety data sheet in accordance with 19 CFR 1910.1200. Any ingredient that is not listed on either the SDS or label is not considered hazardous and poses no risk to the user.

SECTION 4: First Aid Measures

(4a) Necessary measures if exposed:

- GENERAL INFORMATION : Have SDS if medical advice is needed. Seek a medical professional or doctor if you feel unwell or if any irritation persists. Please refer to section 4c to determine if exposure requires immediate medical attention.
- IF ON SKIN (or hair) : Wash with soap and water. Take off any contaminated clothing and launder before reuse.
- IF IN EYES : Wash eyes with running water for at least 10 minutes or until satisfied.
- IF INHALED : Move to fresh air. Administer oxygen if breathing is difficult. If breathing has stopped give artificial respiration and seek medical attention immediately.
- IF INGESTED (or swallowed) : Do not induce vomiting unless instructed to do so by a medical professional. Never give anything by mouth to an unconscious person. If person is unconscious, roll person on his or her side to prevent aspiration if vomiting occurs.

(4b) Most important exposure symptoms and effects, both acute and delayed:

- Skin contact symptoms : Mixture may dry and crack skin. If irritation or corrosion occurs, skin will turn red and will feel itchy or uncomfortable.
- Eye contact symptoms : Eye sight may become blurry on contact. Redness, irritation, and tearing may also be associated with exposure.
- Inhalation symptoms : Excessive inhalation may cause respiratory irritation, dizziness, drowsiness, fatigue, nausea, headache, possible unconsciousness, shortness of breath, or vertigo.
- Ingestion symptoms : May cause intestinal irritation, nausea, diarrhea, or vomiting. Aspiration may be fatal in some situations.

(4c) Indication of immediate medical attention if necessary:

Seek immediate medical attention if you experience exposure via skin, ingestion, or eye contact.

SECTION 5: Fire Fighting Measures

(5a) Extinguishing media:

Suitable extinguishing media : Dry chemical, sand, or carbon dioxide
Unsuitable extinguishing media : Not determined

(5b) Specific hazards arising from the chemical:

Fire Hazard : Nitrogen oxides formed when burned
Explosion/Combustion Hazard : Not determined

(5c) Special protective equipment and precautions for fire-fighters:

Suggested protective equipment : No suggested equipment is available for recommendation
Precautions for firefighters : Not determined

SECTION 6: Accidental Release Measures

(6a) Personal precautions, protective equipment, and emergency procedures:

If released or spilled : For large spills, dike up and pump into appropriate containers.
For small spills, use a noncombustible absorbent material (such as sand) and shovel into suitable containers.
Protective equipment : See Section 8 for appropriate personal protection gear for safe handling.

(6b) Methods and materials for containment and cleaning up:

Neutralizing chemical : Not determined
Waste disposal method : Small quantities can be loaded into waste barrels and offered to an appropriate landfill if local regulations allow.
Contact a professional waste removal company for proper disposal methods.

SECTION 7: Handling and Storage

(7a) Precautions for safe handling:

Ground all transfer equipment. Hold bulk storage under a nitrogen blanket.
Wear protective equipment. Follow specific instructions found on label and in Section 2 of this SDS.
Proper protective equipment information can be found in Section 8 of this SDS.

(7b) Conditions for safe storage:

Storage conditions : Avoid contact with copper or copper-bearing alloys. Follow general housekeeping procedures.
Specific hazards for storage : None known

SECTION 8: Exposure Control and Personal Protection

(8a) Exposure limits:

Chemical Name:	Identifier (CAS No.):	PEL:	ACGIH:	NOISH:
Isophorone Diamine	n/a	n/a	n/a	n/a
Benzyl Alcohol	n/a	10 ppm	n/a	n/a
1, 3-Benzenedimethanamine	n/a	n/a	n/a	n/a

(8b) Appropriate engineering controls:

Good mechanical ventilation may be adequate for maintain airborne concentrations below established exposure limits for large uncontrolled releases. If exposure limits are exceeded and inhaled: use a NOISH approved respirator.

(8c) Individual protection measures and personal protective equipment:

- Skin protection : Handle material with gloves and protective clothing. Inspect gloves prior to use. Use proper glove removal techniques so that no skin comes into contact with the outside of the glove. Gloves must be chemically resistant (such as rubber).
- Eye protection : Use NIOSH/OSHA or EN 166 approved eye protection.
- General hygiene : Practice good industrial hygiene. Wash hands before breaks and at the end of the workday. Keep product away from foodstuffs, beverages, and feed. Wash and launder all contaminated clothing before reuse.

SECTION 9: Physical Characteristics

- Appearance : Pale straw colored liquid
- Odor : Amine-like
- Odor threshold : Data not available or applicable
- pH : Data not available or applicable
- Melting point/freezing point : Data not available or applicable
- Initial boiling point and range : > 150°C @ 5 mm HG
- Flash point : Data not available or applicable
- Evaporation rate : Data not available or applicable
- Flammability : Data not available or applicable
- Upper/lower explosive limits : Data not available or applicable
- Vapor pressure : .02 mm HG @ 20°C, 68°F
- Vapor density : Data not available or applicable
- Relative density : 1.0-1.01
- Solubility : Moderately soluble
- Partition coefficient : Data not available or applicable
- Auto-ignition temperature : Data not available or applicable
- Decomposition temperature : Data not available or applicable
- Viscosity : Data not available or applicable

SECTION 10: Stability and Reactivity**(10a) Reactivity:**

Not determined

(10b) Chemical stability:

Not determined

(10c) Possibility of hazardous reactions:

Not determined

(10d) Conditions to avoid:

Can react strongly with epoxy resins at elevated temperatures

(10e) Incompatible materials:

Epoxy resins under uncontrolled conditions and strong oxidizing agents

PRODUCT: ShieldKote Hardener

(10f) Hazardous decomposition:

Nitrogen oxides when burned

SECTION 11: Toxicological Information**(11a) Likely routes of exposure:**

Ingestion, inhalation (if exposed to mists), or skin or eye contact.

(11b) Symptoms related to the physical, chemical and toxicological characteristics:

Headache, dizziness, light-headedness, weakness, incoordination, sleepiness; Eye, skin, and respiratory irritation.

(11c) Delayed, immediate effects, and chronic effects from short and longterm exposure:

Not determined

(11d) Numerical measures of toxicity:

Known toxic ingredients	:	Isophorone Diamine Benzyl Alcohol 1, 3-Benzenedimethanamine
Acute toxicity estimates		
LD50 Oral	:	1270.5 mg/kg bw
LD50 Dermal	:	5714 mg/kg bw
LC50 Inhalation	:	6.7 mg/L (Dust & Mist)

(11e) Hazardous chemical listings:

National Toxicology Program Report	:	No ingredients listed
International Agency for Research on Cancer	:	No ingredients listed

SECTION 12: Ecological Information**(12a) Ecotoxicity:**

Product is considered hazardous to aquatic environments. Avoid release into water ways.

(12b) Persistence and degradability:

Not determined

(12c) Bioaccumulative potential:

Not determined

(12d) Mobility in soil:

Not determined

(12e) Other adverse effects:

Not determined

SECTION 13: Disposal Considerations

(13a) Precautions for proper disposal:

Small quantities should be stored in waste metal drums and sealed for removal to an approved landfill or incinerated in accordance with local, state or federal regulations.

Large masses of curing epoxy will chemically react and accelerate the curing process and cause the material to hyper react and rapidly expand. Place pots of mixed epoxy in a safe area, away from workers and never allow concentrated masses to sit for any length of time (beyond recommend Pot time). Dispose of solid mass material only when cure is complete and the mass has cooled. Follow and comply with all federal, state or local disposal regulations.

DO NOT dispose of resin or hardener in a liquid state. Waste resin and hardener should be mixed and cured to a non-hazardous inert solid before disposal.

(13b) Other information:

Consult with a licensed waste removal company for proper disposal considerations. Dispose of mixture in accordance with local, state, and federal regulations.

SECTION 14: Transportation Information

(14a) United Nations shipping information:

UN shipping number : 1760
UN proper shipping name : Corrosive liquids, n.o.s.
IMO Packaging Group : Not determined

(14b) United States Department of Transportation information:

Transport hazard class : 8
D.O.T. shipping name : Corrosive liquids, n.o.s.
D.O.T. classification : Corrosive
Shipping placards :



(14c) Other information:

Environmental hazards : Yes, is hazardous to aquatic environments
International bulk chemical code : Not determined
Special precautions : Not determined

SECTION 15: Regulatory Information

SARA 302 components : No applicable ingredients
SATA 313 components : No applicable ingredients
Safety Data Sheet : OSHA, 29 CFR 1910.1200 of the United States Code
Regulatory Agency :
Product and Product Label : OSHA, 29 CFR 1910.1200 of the United States Code
Regulatory Agency :

Note : The product label and its wording and symbols may differ from the hazard categories, statements, and wording that are presented in this SDS. This might occur if the product is not subject to OSHA labeling requirements or if the product is regulated by a different government. The label may also indicate additional hazards or precautions that are not listed on this safety data sheet—this is done at the discretion of the responsible party and only serves to ensure that the user's safety is prioritized above government regulation.

SECTION 16: Other Information

(16a) Statement of warranty:

This information is based on KOREKOTE's current knowledge and is intended to explain the product for the purposes of health, safety and environmental requirements only. It should not be construed as a guarantee of any specific property of the product. As the conditions or methods of use can vary beyond KOREKOTE's control, KOREKOTE does not assume any responsibility and expressly disclaims any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user.

(16b) Date of preparation and revision:

CREATED ON: 8 May 2015

LATEST REVISION MADE ON: 10 June 2015