



\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TRA-BOND F112 HARDENER  
Hardener.

COMPANY ADDRESS: Henkel Corporation  
46 Manning Road  
Billerica, MA 01821

EMERGENCY CONTACT NUMBERS:  
MEDICAL: 1.866-359-5657 (Health & Safety Call Center-24 hours)  
TRANSPORT: CHEMTREC: 1.800.424.9300 (24 hours)  
CHEMTREC International: 1.703.527.3887 (call collect)  
Customer Service: 1.781.828.3300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER!  
CORROSIVE. CAUSES SEVERE BURNS TO SKIN.  
CORROSIVE. CAUSES SEVERE OR PERMANENT DAMAGE TO EYES.  
SEVERE SKIN IRRITANT. MAY CAUSE PERMANENT DAMAGE.  
HARMFUL IF INHALED.  
TOXIC IN CONTACT WITH SKIN.  
EYE IRRITANT.  
CORROSIVE IF SWALLOWED.  
RESPIRATORY SENSITIZER.  
SKIN SENSITIZER.  
Blue Liquid Ammonia Odor

EYE: Extremely severe irritant/corrosive. May cause severe burns which could lead to permanent damage or total loss of vision. The vapor and the liquid may cause burning, intense irritation and excessive watering of the eye.

SKIN CONTACT: Corrosive, causes permanent skin damage. Severely irritating; may cause permanent skin damage. Repeated and/or prolonged contact may cause skin sensitization. Can be absorbed through skin causing systemic toxic effects.

INHALATION: Vapor or aerosol, if generated, can cause irritation of the eyes, nose and respiratory tract. Avoid breathing vapors or mists. Exposure to high concentrations may produce lung damage. Respiratory sensitizer.

INGESTION: Corrosive to mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY	Amine		
COMPONENT	CAS NUMBER	CONCENTRATION (% by weight)	
Epoxy polyamine adduct 3,3'-Oxybis(ethyleneoxy)bis(propylamine)	PROPRIETARY 4246-51-9	>50	20 - 35

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Diethylenetriamine	111-40-0	10 - 20
Bisphenol A, (chloromethyl)oxirane polymer, reaction product with diethylene glycol bis(3-aminopropyl ether)	68585-28-4	1 - 5

### 4. FIRST-AID MEASURES

EYE	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.
SKIN CONTACT	Remove grossly contaminated clothing, including shoes, and launder before re-use. Discard shoes. Wash skin with soap and water. Obtain immediate medical attention.
INHALATION	Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for proper medical attention.
INGESTION	DO NOT attempt to give anything by mouth to an unconscious person. DO NOT induce vomiting. If individual is conscious, give milk or water to dilute stomach contents. Keep warm and quiet. Get prompt medical attention.

### 5. FIREFIGHTING MEASURES

AUTOIGNITION	Not determined.
FLASH POINT	> 93 °C (Closed Cup)
EXTINGUISHING MEDIA	Dry Chemical; Foam; CO <sub>2</sub> ; Water Spray
FIRE & EXPLOSION HAZARDS	Combustible at high temperatures.
HAZARDOUS COMBUSTION PRODUCTS	Carbon dioxide, carbon monoxide, oxides of nitrogen and unknown organics.
LOWER EXPLOSION LIMIT (%)	Not determined.
UPPER EXPLOSION LIMIT (%)	Not determined.

### 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES	No smoking, flames or flares in hazard area. Keep unnecessary people away; isolate hazard area and deny entry. Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance. Wear rubber safety shoes or rubber boots over leather safety shoes. Ventilate area. Do not allow to enter drains, sewers or watercourses. Absorb spillages onto sand, earth or any suitable absorbent material. Scrape up and place in suitably labeled container for disposal. Disposal should be in accordance with local, state or national legislation.
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For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

### 7. HANDLING AND STORAGE

STORAGE TEMPERATURE	25 °C
SHELF LIFE, (Days)	180
HANDLING/STORAGE	Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry area away from water.
SENSITIVITY TO STATIC ELECTRICITY	No
SPECIAL SENSITIVITY	Store in tightly closed containers to protect from atmospheric moisture. Use and store with adequate exhaust ventilation.
SENSITIVITY TO MECHANICAL IMPACT	No

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	EXPOSURE LIMITS <u>ACGIH</u>	<u>OSHA</u>	<u>Mfg Working Standard</u>
Diethylenetriamine	Skin - potential significant contribution to overall exposure by the cutaneous route 1 ppm TWA.		
VENTILATION REQUIREMENTS	Provide local exhaust ventilation system to meet published exposure limits.		
EYE PROTECTION REQUIREMENTS	Safety glasses, goggles or face shield to protect against splashing.		
GLOVE REQUIREMENTS	Nitrile rubber or Viton™ gloves are recommended. Cotton or other absorbent gloves should not be worn.		
CLOTHING REQUIREMENTS	Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn. Rubber boots and apron if exposure is severe.		
CHANGE/REMOVAL OF CLOTHING	Remove contaminated clothing and launder before reuse. Discard shoes, belts, wallets, and any other contaminated leather items.		
WASH REQUIREMENTS	Wash before eating, drinking, or using toilet facilities.		
RESPIRATOR REQUIREMENTS	Avoid prolonged or repeated breathing of vapor or mists. If exposure may or does exceed occupational exposure limits, use a NIOSH approved respirator to prevent overexposure.		

### 9. PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE	Mixture
PHYSICAL FORM	Liquid
COLOR	Blue
ODOR	Ammonia
ODOR THRESHOLD	Not available
PH AS IS	Not applicable
pH IN (1%) SOLUTION	> 7
OXIDIZING PROPERTIES	Not applicable
BOILING POINT	> 146 °C
MELTING/FREEZING POINT	Not determined.
SOLUBILITY IN WATER	Slightly Soluble
PARTITION COEFFICIENT (n-octanol/water)	Not determined.
VISCOSITY	Not determined.
SPECIFIC GRAVITY (WATER=1)	1.000
BULK DENSITY	8.34 lb/gal
EVAPORATION RATE	Not applicable
VAPOR PRESSURE (mmHg)	< 1 mm Hg 20 C
VAPOR DENSITY (air = 1)	> 1.0
VOLATILES	Negligible
VOLATILE ORGANIC COMPOUNDS	Negligible
AUTOIGNITION	Not determined.
FLASH POINT	> 93 °C (Closed Cup)

### 10. STABILITY AND REACTIVITY

STABILITY	Stable
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MATERIALS TO AVOID	Strong oxidizers, Acids, Bases, Epoxy resins
CONDITIONS TO AVOID	Elevated temperatures
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon dioxide, carbon monoxide, oxides of nitrogen and unknown organics.
HAZARDOUS POLYMERIZATION CONDITIONS	Hazardous polymerization will not occur.

### 11. TOXICOLOGICAL INFORMATION

ROUTE OF ENTRY Eye Contact; Skin Contact; Inhalation; Ingestion

<b>CARCINOGEN</b>	<u>IARC</u>	<u>NTP</u>	<u>OSHA Substance</u>
	<u>(group)</u>		<u>Specific Regulation</u>

COMPONENT  
There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use.

#### CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

EFFECTS OF CHRONIC EXPOSURE The severity of acute effects is such that significant repeated or prolonged exposure is unlikely.

TARGET ORGANS	Eyes; Skin; Respiratory system; Gastrointestinal
RESPIRATORY SENSITIZATION	Sensitizer. May cause allergic reaction.
SKIN SENSITIZATION	Sensitizer. May cause allergic reaction.

#### PRODUCT TOXICOLOGY

EYE IRRITATION A severe irritant to skin, eyes and respiratory system.

COMPONENT	ORAL TOXICITY	NOTES ON ORAL TOXICITY
3,3'-	Oral LD50: Rat 3160 mg/kg	Corrosive to mouth, throat and stomach.

Oxybis(ethyleneoxy)bis(propylamine)		
Diethylenetriamine	Oral LD50: Rat 1080 mg/kg	Slightly toxic. Corrosive to mouth, throat and stomach.

COMPONENT	DERMAL TOXICITY	NOTES ON DERMAL TOXICITY
3,3'-	Dermal LD50: Rat > 2150 mg/kg	Corrosive.

Oxybis(ethyleneoxy)bis(propylamine)	Dermal LD50: Rabbit 2500 mg/kg	
Diethylenetriamine	Dermal LD50: Rabbit 1090 mg/kg	Can be absorbed through skin causing systemic toxic effects. Corrosive, causes permanent skin damage. Repeated and/or prolonged contact may cause skin sensitization.

COMPONENT	INHALATION TOXICITY	NOTES ON INHALATION TOXICITY
3,3'-		Inhalation of dust or vapor may cause severe irritation to the nasal passages and/or the respiratory system.

Diethylenetriamine	Inhalation LC50 (4hr): Rat	Possible respiratory sensitizer. Extremely severe
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0.07 - 0.3 mg/l

irritant/corrosive. May cause severe burns which could lead to permanent damage to respiratory system. Highly toxic.

### COMPONENT

3,3'-  
Oxybis(ethyleneoxy)bis(propylamine)

### NOTES ON EYE IRRITATION

Extremely severe irritant/corrosive. May cause severe burns which could lead to permanent damage or total loss of vision.

Diethylenetriamine

Extremely severe irritant/corrosive. May cause severe burns which could lead to permanent damage or total loss of vision.

## 12. ECOLOGICAL INFORMATION

MOBILITY	The product is soluble in water.
POTENTIAL TO BIOACCUMULATE	Unknown.
AQUATIC TOXICITY	Not determined.

## 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS	Disposal should be in accordance with local, state or national legislation.
EMPTY CONTAINER WARNINGS	Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.

## 14. TRANSPORTATION INFORMATION

This section provided for general information only. The shipping description below may not represent requirements for all modes of transportation, packaging, shipping methods or locations outside of the United States.

FOR MORE COMPLETE TRANSPORTATION REGULATORY INFORMATION PLEASE REFER TO THE SHIPPING DOCUMENTS ACCOMPANYING THE SHIPMENT OF THIS PRODUCT.

### DOT CLASSIFICATION

PROPER SHIPPING NAME	POLYAMINES, LIQUID, CORROSIVE, N.O.S.
TECHNICAL NAME	(3,3'-Oxybis(ethyleneoxy)bis(propylamine) / Diethylenetriamine)
HAZARD CLASS	8
SUB. HAZARD CLASS	
U.N. NUMBER	UN2735
PACKING GROUP	III

### ICAO/IATA CLASSIFICATION

PROPER SHIPPING NAME	POLYAMINES, LIQUID, CORROSIVE, N.O.S.
TECHNICAL NAME	(3,3'-Oxybis(ethyleneoxy)bis(propylamine) / Diethylenetriamine)
HAZARD CLASS	8
SUB. HAZARD CLASS	
U.N. NUMBER	UN2735
PACKING GROUP	III

The information provided herein may not include the impact of additional regulatory requirements (eg, for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and/of marine

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pollutants under CWA or other similar federal, state or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of this material.

### 15. REGULATORY INFORMATION

TSCA	All components are on the TSCA inventory.
Canadian Domestic Substance List (DSL)	Not on Inventory
China (IECSC)	On the IECSC Inventory.

SARA - Section 313 (Superfund Amendments and Reauthorization Act of 1986 - 40CFR 372)	CAS NUMBER
Contains no substances at or above the reporting threshold under Section 313.	

#### CALIFORNIA PROPOSITION 65

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm.

Unless a concentration is specified in Section 2 of the MSDS, the below chemical/s are present in trace amounts.

COMPONENT	CAS NUMBER
None reportable.	

### 16. OTHER INFORMATION

#### HMIS® Hazard Ratings

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'.

\* = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard</u>
*3	1	0

PREPARED BY: Regulatory Affairs  
Henkel Corporation

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**\*\*\* MATERIAL SAFETY DATA SHEET \*\*\***

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: TRA-BOND F112 RESIN  
Epoxy Resin

COMPANY ADDRESS: Henkel Corporation  
46 Manning Road  
Billerica, MA 01821

EMERGENCY CONTACT NUMBERS:  
MEDICAL: 1.866-359-5657 (Health & Safety Call Center-24 hours)  
TRANSPORT: CHEMTREC: 1.800.424.9300 (24 hours)  
CHEMTREC International: 1.703.527.3887 (call collect)  
Customer Service: 1.781.828.3300

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

WARNING.  
EYE IRRITANT.  
HARMFUL IF SWALLOWED.  
SKIN IRRITANT.  
SKIN SENSITIZER.  
Light yellow Liquid Slight Odor

EYE: Irritating, but does not injure eye tissue. Contact with eyes causes redness and discomfort which is transient.

SKIN CONTACT: Irritating to the skin. Repeated and/or prolonged contact may cause skin sensitization.

INHALATION: Unlikely to be hazardous by inhalation because of the low vapor pressure of the material at ambient temperature. Vapor or aerosol, if generated, can cause irritation of the eyes, nose and respiratory tract. Avoid breathing vapors or mists.

INGESTION: Low oral toxicity. Ingestion may cause irritation of the gastrointestinal tract. May cause nausea, vomiting and diarrhea.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL FAMILY	Formulated Epoxy Resin		
COMPONENT	CAS NUMBER	CONCENTRATION (% by weight)	
2,2'[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3	>50	
Phenol-formaldehyde polymer glycidyl ether	28064-14-4	35 - 50	

**4. FIRST-AID MEASURES**

EYE: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

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SKIN CONTACT	Wash skin with soap and water. If symptoms develop, obtain medical attention.
INHALATION	Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.
INGESTION	DO NOT attempt to give anything by mouth to an unconscious person. DO NOT induce vomiting. If individual is conscious, give milk or water to dilute stomach contents. Keep warm and quiet. Get prompt medical attention.

### 5. FIREFIGHTING MEASURES

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AUTOIGNITION	Not available
FLASH POINT	484 °F (Pensky-Martens Closed Tester)
EXTINGUISHING MEDIA	Foam; Water spray or fog, CO <sub>2</sub> , Dry Chemical; Do not use direct water stream on burning liquid.
SPECIAL FIREFIGHTING PROCEDURES	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.; Cool exposed equipment with water spray.
FIRE & EXPLOSION HAZARDS	Combustible at high temperatures. Combustion will evolve toxic and irritant vapors. Polymerization may take place at elevated temperatures.
HAZARDOUS COMBUSTION PRODUCTS	Carbon monoxide, carbon dioxide, chlorine compounds, hydrocarbons of indeterminate nature (depending on conditions).
LOWER EXPLOSION LIMIT (%)	Not applicable
UPPER EXPLOSION LIMIT (%)	Not applicable

### 6. ACCIDENTAL RELEASE MEASURES

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SPILL AND LEAK PROCEDURES	Ventilate area. May cause allergic skin reaction. Use suitable protective clothing. Absorb spillages onto sand, earth or any suitable absorbent material. Do not allow to enter drains, sewers or watercourses. Scrape absorbed material into proper waste containers. Wash area with soap and water; prevent entry of wash water into drains or other waterways. Dispose of wastes and water in accordance with all applicable federal, state and local regulations.
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For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

### 7. HANDLING AND STORAGE

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STORAGE TEMPERATURE	25 °C
SHELF LIFE, (Days)	180
HANDLING/STORAGE	Keep containers properly sealed and store indoors in a well ventilated area. Keep away from heat and sources of ignition. Keep away from oxidizing agents. Keep away from acids.
SENSITIVITY TO STATIC ELECTRICITY	No
SPECIAL SENSITIVITY	Store away from amines.
SENSITIVITY TO MECHANICAL IMPACT	No
OTHER PRECAUTIONS	This material should not be spilled, dumped, or flushed into sewers or public waterways.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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VENTILATION REQUIREMENTS	Use in a well-ventilated area. Vent curing oven to outdoors.
EYE PROTECTION REQUIREMENTS	Wear safety glasses with side shields. Eye washing equipment must be



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GLOVE REQUIREMENTS	provided at handling points. Employee must wear appropriate protective gloves to prevent contact with this substance. Impervious neoprene or rubber gloves are recommended. Wear thermal insulating gloves when handling hot masses.
CLOTHING REQUIREMENTS	Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn.
CHANGE/REMOVAL OF CLOTHING	Remove contaminated clothing and laundry before reuse. Discard shoes, belts, wallets, and any other contaminated leather items.
WASH REQUIREMENTS	Wash exposed areas with soap and water.
RESPIRATOR REQUIREMENTS	None required under normal handling conditions. Use NIOSH approved respirator if vapor or mist levels are irritating.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL FORM	Liquid
COLOR	Light yellow
ODOR	Slight
ODOR THRESHOLD	Not available
PH AS IS	Not applicable
pH IN (1%) SOLUTION	Not applicable
OXIDIZING PROPERTIES	Not applicable
BOILING POINT	> 500 °F
SOLUBILITY IN WATER	Insoluble
PARTITION COEFFICIENT (n-octanol/water)	Not applicable
VISCOSITY	11000 - 15000 cPs
SPECIFIC GRAVITY (WATER=1)	1.2
BULK DENSITY	9.76 lb/gal
EVAPORATION RATE	Not applicable
VAPOR PRESSURE (mmHg)	0.03 @ 25°C
VAPOR DENSITY (air = 1)	Not applicable
VOLATILES	Negligible
VOLATILE ORGANIC COMPOUNDS	Approximately 0.25 g/liter
AUTOIGNITION	Not available
FLASH POINT	484 °F (Pensky-Martens Closed Tester)

**10. STABILITY AND REACTIVITY**

STABILITY	Stable
STABILITY DETAIL	Material is stable under normal temperatures and pressures.
MATERIALS TO AVOID	Oxidizers, Bases, Acids, Amines
CONDITIONS TO AVOID	Avoid excessive heat.
HAZARDOUS DECOMPOSITION PRODUCTS	Thermal decomposition products are hazardous and/or toxic. Carbon monoxide, carbon dioxide, chlorine compounds, hydrocarbons of indeterminate nature (depending on conditions).
HAZARDOUS POLYMERIZATION CONDITIONS	Heat may cause hazardous polymerization.
REACTIVITY	May polymerize with amine compounds.

**11. TOXICOLOGICAL INFORMATION**

ROUTE OF ENTRY Eye Contact; Skin Contact; Inhalation

CARCINOGEN	<u>IARC</u> (group)	<u>NTP</u>	<u>OSHA Substance</u> <u>Specific Regulation</u>
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### COMPONENT

There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use.

### CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

#### EFFECTS OF CHRONIC EXPOSURE

The toxicological properties of this product have not been fully evaluated. Use of good industrial hygiene practices is required. Avoid direct contact with skin or eyes. Do not ingest or inhale.

#### TARGET ORGANS

Skin; Eyes

#### SKIN SENSITIZATION

Sensitizer. May cause allergic reaction.

### PRODUCT TOXICOLOGY

#### PRODUCT INFORMATION

Low acute toxicity under normal conditions of handling and use.

#### EYE IRRITATION

Slightly irritant to skin and eyes. Vapor released during hot processing may be irritant to the respiratory system.

#### COMPONENT

2,2'[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis oxirane

#### ORAL TOXICITY

Oral LD50: Rat > 4 g/kg  
Oral LD50: Rat 11 g/kg

#### NOTES ON ORAL TOXICITY

Low oral toxicity.

#### COMPONENT

2,2'[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis oxirane

#### DERMAL TOXICITY

#### NOTES ON DERMAL TOXICITY

Repeated and/or prolonged contact may cause skin sensitization. Repeated or prolonged skin contact may result in mild irritation.

#### COMPONENT

2,2'[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis oxirane

#### INHALATION TOXICITY

#### NOTES ON INHALATION TOXICITY

Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Unlikely to be hazardous by inhalation because of the low vapor pressure of the material at ambient temperature.

#### COMPONENT

2,2'[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis oxirane

#### NOTES ON EYE IRRITATION

Irritating, but does not injure eye tissue.

## 12. ECOLOGICAL INFORMATION

#### POTENTIAL EFFECT ON ENVIRONMENT

Do not allow to enter drains, sewers or watercourses.

#### MOBILITY

Insoluble

#### PERSISTENCE AND DEGRADABILITY

Not readily biodegradable.

#### POTENTIAL TO BIOACCUMULATE

Unknown.

#### AQUATIC TOXICITY

None Established

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**13. DISPOSAL CONSIDERATIONS**

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WASTE DISPOSAL METHODS	Disposal should be in accordance with local, state or national legislation.
EMPTY CONTAINER WARNINGS	Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.

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**14. TRANSPORTATION INFORMATION**

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This section provided for general information only. The shipping description below may not represent requirements for all modes of transportation, packaging, shipping methods or locations outside of the United States.

FOR MORE COMPLETE TRANSPORTATION REGULATORY INFORMATION PLEASE REFER TO THE SHIPPING DOCUMENTS ACCOMPANYING THE SHIPMENT OF THIS PRODUCT.

<b>DOT CLASSIFICATION</b>	Not Regulated
<b>ICAO/IATA CLASSIFICATION</b>	Not classified as dangerous.

The information provided herein may not include the impact of additional regulatory requirements (eg, for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and/of marine pollutants under CWA or other similar federal, state or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of this material.

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**15. REGULATORY INFORMATION**

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TSCA	All components are on the TSCA inventory.
Canadian Domestic Substance List (DSL)	Is on DSL
China (IECSC)	On the IECSC Inventory.
Australia (AICS)	On the AICS Inventory.
Korea (KECI)	On the KECI Inventory.
Philippines (PICCS)	On the PICCS Inventory.
EINECS	All components of this product are listed in EINECS or ELINCS, or are otherwise exempt from EU notification requirements.

SARA - Section 313 (Superfund Amendments and Reauthorization Act of 1986 - 40CFR 372)	CAS NUMBER
Contains no substances at or above the reporting threshold under Section 313.	

**CALIFORNIA PROPOSITION 65**

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm.

Unless a concentration is specified in Section 2 of the MSDS, the below chemical/s are present in trace amounts.

<b>COMPONENT</b>	<b>CAS NUMBER</b>
Epichlorohydrin	106-89-8

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**16. OTHER INFORMATION**

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**HMIS® Hazard Ratings**

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs by OSHA's 29 CFR 1910.1200, we

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choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'.

\* = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard</u>
/2	1	1

PREPARED BY:

Regulatory Affairs  
Henkel Corporation

The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.