

IDH# 1188045



*** MATERIAL SAFETY DATA SHEET ***

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CATALYST 24LV
Catalyst for Epoxy Resin

COMPANY ADDRESS: Henkel Electronic Materials LLC
14000 Jamboree Road
Irvine, CA 92606

EMERGENCY CONTACT NUMBERS:
 MEDICAL: 1-877-671-4608 (toll free) or 1-303-592-1711
 (24 hours - Poison Control Center)
 TRANSPORT: CHEMTREC: 1-800-424-9300 (24 hours)
 CHEMTREC International: 1-703-527-3887 (call collect)
 Contact Information: 1-888-9-HENKEL (1-888-943-6535)
 Internet: www.henkel.com/electronics

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER!
 CORROSIVE. CAUSES SEVERE BURNS TO SKIN.
 CORROSIVE. CAUSES SEVERE OR PERMANENT DAMAGE TO EYES.
 CORROSIVE IF SWALLOWED.
 RESPIRATORY SENSITIZER.
 SKIN SENSITIZER.
 Harmful to aquatic organisms.
 Colorless Liquid Amine Odor

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

SKIN CONTACT: Corrosive, causes permanent skin damage.

INHALATION: Irritating and/or toxic vapors may be released at elevated temperatures. Irritating to eyes and respiratory tract at elevated temperatures.

INGESTION: Corrosive to mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY	Aromatic Amine		
COMPONENT	CAS NUMBER	CONCENTRATION	
		(% by weight)	
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	100	

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	Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. If symptoms develop, obtain medical attention.
INHALATION	Remove to fresh air. Administer oxygen to aid breathing. Get medical attention.
INGESTION	If individual is conscious, give water to dilute stomach contents. Get prompt medical attention. DO NOT attempt to give anything by mouth to an unconscious person.

5. FIREFIGHTING MEASURES

AUTOIGNITION	Not available
FLASH POINT	> 261 °F (Pensky-Martens Closed Tester)
EXTINGUISHING MEDIA	CO ₂ ; Dry Chemical; Water Spray; Foam
SPECIAL FIREFIGHTING PROCEDURES	Fire fighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.
FIRE & EXPLOSION HAZARDS	Combustible at high temperatures.
HAZARDOUS COMBUSTION PRODUCTS	Thermal decomposition products are hazardous and/or toxic. Carbon dioxide, carbon monoxide, oxides of nitrogen and unknown organics.
LOWER EXPLOSION LIMIT (%)	Not applicable
UPPER EXPLOSION LIMIT (%)	Not applicable

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES	Absorb spillages onto sand, earth or any suitable absorbent material. Sweep up and shovel into waste drums. Wash the spillage area with water.
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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)	365
HANDLING/STORAGE	Store in cool, dry place. Keep in a well ventilated place. Keep containers properly sealed when not in use.
SPECIAL SENSITIVITY	Keep away from heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION REQUIREMENTS	Local exhaust.
EYE PROTECTION REQUIREMENTS	Safety glasses, goggles or face shield to protect against splashing.
GLOVE REQUIREMENTS	The use of chemically resistant gloves is recommended. Neoprene or butyl rubber is recommended.
CLOTHING REQUIREMENTS	Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance.
CHANGE/REMOVAL OF CLOTHING	Remove contaminated clothing and launder before reuse.
WASH REQUIREMENTS	Wash before eating, drinking, or using toilet facilities.
RESPIRATOR REQUIREMENTS	Local exhaust.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Liquid
COLOR	Colorless
ODOR	Amine
ODOR THRESHOLD	Not available

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OXIDIZING PROPERTIES	Not applicable
BOILING POINT	> 250 °C
SOLUBILITY IN WATER	Slightly Soluble
PARTITION COEFFICIENT (n-octanol/water)	Not applicable
SPECIFIC GRAVITY (WATER=1)	1.000
EVAPORATION RATE	Not applicable
VAPOR PRESSURE (mmHg)	< 0.001 mm Hg @ 25° C
VAPOR DENSITY (air = 1)	Not applicable
VOLATILES	None
VOLATILE ORGANIC COMPOUNDS	Nil
AUTOIGNITION	Not available
FLASH POINT	> 261 °F (Pensky-Martens Closed Tester)

10. STABILITY AND REACTIVITY

STABILITY	Stable
STABILITY DETAIL	Material is stable under normal temperatures and pressures.
MATERIALS TO AVOID	Organic acids, Mineral acids, Strong oxidizers
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	Skin Contact; Eye Contact; Ingestion
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CARCINOGEN	<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

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

PRODUCT TOXICOLOGY

PRODUCT INFORMATION	This data sheet is based on a consideration of the properties of the constituents. Causes burns to skin, eyes, respiratory system and gastrointestinal tract.
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COMPONENT	ORAL TOXICITY	NOTES ON ORAL TOXICITY
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Oral LD50: Rat 3160 mg/kg	Corrosive to mouth, throat and stomach.

COMPONENT	DERMAL TOXICITY	NOTES ON DERMAL TOXICITY
3,3'-	Dermal LD50: Rabbit 2500	Corrosive.

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Oxybis(ethyleneoxy)bis(propylamine)	mg/kg Dermal LD50: Rat > 2150 mg/kg
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COMPONENT 3,3'-Oxybis(ethyleneoxy)bis(propylamine)	INHALATION TOXICITY	NOTES ON INHALATION TOXICITY Inhalation of dust or vapor may cause severe irritation to the nasal passages and/or the respiratory system.
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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.
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12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT	Harmful to aquatic organisms.
PERSISTENCE AND DEGRADABILITY	Not readily biodegradable.
POTENTIAL TO BIOACCUMULATE	Unknown.
AQUATIC TOXICITY	None Established

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(2,1-ethane-diyloxy)) bis-1-Propanamine)
HAZARD CLASS	8
SUB. HAZARD CLASS	
U.N. NUMBER	UN2735
PACKING GROUP	II

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.

15. REGULATORY INFORMATION

TSCA Canadian Domestic Substance List (DSL)	All components are on the TSCA inventory. Is on DSL
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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.
 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>
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PREPARED BY: Regulatory Affairs
 Henkel Electronic Materials

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