

Henkel

PRODUCT NUMBER: EC600008

ISSUE DATE: 15-December-2010

IDH# 1409013



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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CATALYST 9
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.
SEVERE SKIN IRRITANT. MAY CAUSE PERMANENT DAMAGE.
HARMFUL IF INHALED.
EYE IRRITANT.
CORROSIVE IF SWALLOWED.
RESPIRATORY SENSITIZER.
SKIN SENSITIZER.
Pink Liquid Amine 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: Severely irritating; may cause permanent skin damage. Corrosive, causes permanent skin damage. Moderately toxic. Can be rapidly absorbed through skin. Repeated and/or prolonged contact may cause skin sensitization.

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.

INGESTION: Corrosive to mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY: Amines

COMPONENT	CAS NUMBER	CONCENTRATION
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		(% by weight)
Tetraethylenepentamine	112-57-2	>50
Ethane, 1,2-dichloro-, polymer with ammonia	29320-38-5	5 - 10
Triethylenetetramine	112-24-3	5 - 10

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. Obtain immediate medical attention.
SKIN CONTACT	Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. Obtain immediate 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

AUTOIGNITION	Not available
FLASH POINT	160 °C (Pensky-Martens Closed Tester)
EXTINGUISHING MEDIA	Foam; Water Fog; CO ₂ ; Dry Chemical
SPECIAL FIREFIGHTING PROCEDURES	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.
FIRE & EXPLOSION HAZARDS	Combustible at high temperatures.
HAZARDOUS COMBUSTION PRODUCTS	Carbon monoxide, carbon dioxide, ammonia, amines. Nitrogen oxides.
LOWER EXPLOSION LIMIT (%)	Not applicable
UPPER EXPLOSION LIMIT (%)	Not applicable

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. Wash the spillage area with water. Washings must be prevented from entering surface water drains.
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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	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

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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

TARGET ORGANS
RESPIRATORY SENSITIZATION
SKIN SENSITIZATION

The severity of acute effects is such that significant repeated or prolonged exposure is unlikely.
Eyes; Skin; Respiratory system
Sensitizer. May cause allergic reaction.
Sensitizer. May cause allergic reaction.

PRODUCT TOXICOLOGY

PRODUCT INFORMATION

This material is a severe irritant and may cause burns following skin and eye contact.

COMPONENT	ORAL TOXICITY	NOTES ON ORAL TOXICITY
Tetraethylenepentamine	Oral LD50: Rat 2.1 g/kg	Corrosive to mouth, throat and stomach.
Triethylenetetramine	Oral LD50: Rat 4340 mg/kg Oral LD50: Rabbit 5500 mg/kg Oral LD50: Mouse 1600 mg/kg	Slightly toxic. Corrosive to mouth, throat and stomach.
COMPONENT	DERMAL TOXICITY	NOTES ON DERMAL TOXICITY
Tetraethylenepentamine	Dermal LD50: Rabbit 660 mg/kg	Corrosive, causes permanent skin damage. Repeated and/or prolonged contact may cause skin sensitization. Can be rapidly absorbed through skin.
Triethylenetetramine	Dermal LD50: Rabbit 800 mg/kg	Corrosive. Slightly toxic. Skin sensitizer.
COMPONENT	INHALATION TOXICITY	NOTES ON INHALATION TOXICITY
Tetraethylenepentamine		May cause irritation to eyes and respiratory system. Possible respiratory sensitizer.
Triethylenetetramine		Respiratory irritant. Possible respiratory sensitizer.
COMPONENT		NOTES ON EYE IRRITATION
Tetraethylenepentamine		Extremely severe irritant/corrosive. May cause severe burns which could lead to permanent damage or total loss of vision.
Triethylenetetramine		Corrosive.

12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT	Do not allow to enter drains, sewers or watercourses.
MOBILITY	The product is soluble in water.
POTENTIAL TO BIOACCUMULATE	The product has low potential for bioaccumulation.
ECOTOXICITY	May cause harm to aquatic organisms.

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AQUATIC TOXICITY	None Established
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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	TETRAETHYLENEPENTAMINE SOLUTION
HAZARD CLASS	8
U.N. NUMBER	UN2320
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 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)	Is on DSL
China (IECSC)	On the IECSC Inventory.
Australia (AICS)	On the AICS Inventory.
Philippines (PICCS)	On the PICCS 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

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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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