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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE CAT 43 AMB known as CATALYST 43 AMB 8LB INDIV	IDH number:	1188164
Product type:	Catalyst	Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	Telephone:	(860) 571-5100
		MEDICAL EMERGENCY Phone:	Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711
		TRANSPORT EMERGENCY Phone:	CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887
		Internet:	www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: HARMFUL IF SWALLOWED.
TOXIC IN CONTACT WITH SKIN.
CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
MAY CAUSE AN ALLERGIC SKIN REACTION.
MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY ORAL	4
ACUTE TOXICITY DERMAL	3
SKIN CORROSION	1C
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection. In case of inadequate ventilation wear respiratory protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If experiencing respiratory symptoms: Call a poison center or physician. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Tetraethylene pentamine	112-57-2	60 - 70
N-Aminoethylpiperazine	140-31-8	10 - 20
Imidazole	288-32-4	10 - 20
Triethylenetetramine	112-24-3	1 - 5
Diethylenetriamine	111-40-0	0.1 - 1
2-(2-Aminoethylamino)ethanol	111-41-1	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. If symptoms develop and persist, get medical attention.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	Do not induce vomiting. Rinse out mouth. Do not drink. Never give anything by mouth to an unconscious person. Get medical attention.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
Unusual fire or explosion hazards:	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon, oxides of nitrogen, irritating organic vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Do not allow product to enter sewer or waterways.
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Clean-up methods:

Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling:

Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Refer to Section 8.

Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Tetraethylene pentamine	None	None	(SKIN) Aerosol. 1 ppm (5 mg/m ³) TWA Aerosol. (Skin sensitizer)	None
N-Aminoethylpiperazine	None	None	None	None
Imidazole	None	None	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m ³) TWA (SKIN)	None
Diethylenetriamine	(SKIN) 1 ppm TWA	None	None	None
2-(2-Aminoethylamino)ethanol	None	None	None	None

Engineering controls:

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection:

Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact. Nitrile gloves. EVAL-Laminate gloves. Butyl rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Liquid

Color:

Yellow

Odor:

Amine

Odor threshold:

Not available.

pH:

Not available.

Vapor pressure:

< 0.01 mm hg (25 °C (77°F))

Boiling point/range:

318 °C (604.4 °F)

Melting point/ range:

Not available.

Specific gravity:

0.99

Vapor density:

Not available.

Flash point:

> 93.3 °C (> 199.94 °F) Closed cup

Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility in water:	Soluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	0 %
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Irritating organic vapours. Ammonia.
Incompatible materials:	Strong oxidizing agents. Organic acids. Mineral acids. Sodium hypochlorite. Nitrites.
Reactivity:	Not available.
Conditions to avoid:	Elevated temperatures. Store away from incompatible materials. Direct sunlight.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Mists, vapors or liquid may cause severe irritation or burns. May cause allergic respiratory reaction. Coughing. Wheezing. Shortness of breath.
Skin contact: Causes skin burns. Toxic in contact with skin. May cause allergic skin reaction.
Eye contact: Causes serious eye damage. Burns of the eye may cause blindness.
Ingestion: Harmful if swallowed. Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Tetraethylene pentamine	Oral LD50 (Rat) = 3.99 g/kg Oral LD50 (Rat) = 2.1 g/kg Dermal LD50 (Rabbit) = 0.66 g/kg	Irritant, Mutagen, Allergen
N-Aminoethylpiperazine	None	Irritant, Corrosive, Allergen
Imidazole	None	Allergen, Developmental, Gastrointestinal, Liver, Reproductive
Triethylenetetramine	None	Allergen, Corrosive, Developmental, Irritant, Mutagen
Diethylenetriamine	Oral LD50 (Rat) Approximate 1,140 mg/kg Oral LD50 (Rat) = 1,080 mg/kg Oral LD50 (Rat) = 2.33 g/kg	Allergen, Irritant, Eyes
2-(2-Aminoethylamino)ethanol	Oral LD50 (Rat) = 3,000 mg/kg	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Tetraethylene pentamine	No	No	No
N-Aminoethylpiperazine	No	No	No
Imidazole	No	No	No
Triethylenetetramine	No	No	No
Diethylenetriamine	No	No	No
2-(2-Aminoethylamino)ethanol	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. D002: Corrosive.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Polyamines, liquid, corrosive, n.o.s. (Tetraethylene pentamine, N-Aminoethylpiperazine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Polyamines, liquid, corrosive, n.o.s. (Tetraethylene pentamine, N-Aminoethylpiperazine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Tetraethylene pentamine, N-Aminoethylpiperazine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: III
Marine pollutant: Tetraethylene pentamine

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None above reporting de minimis
CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA Section 313: None above reporting de minimis.
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2 - 4, 8, 11

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