Material Safety Data Sheet

Revision Number: 003.1 **Issue date:** 06/22/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **Fixmaster Steel Liquid**
Product type: Epoxy Hardener

IDH number: 702247
Item number: 97484_239000
Region: United States

Company address:
Henkel Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067

Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state:	Liquid	**HEALTH:**	3
Color:	Blue	**FLAMMABILITY:**	1
Odor:	Ammoniacal	**PHYSICAL HAZARD:**	0
		Personal Protection:	See MSDS Section 8

DANGER**:** CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.
MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.
MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.

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

Potential Health Effects

Inhalation: Respiratory tract burns. Allergic respiratory reaction. Shortness of breath. Coughing.

Skin contact: May be harmful if absorbed through skin. May cause allergic skin reaction. Itching. Rash. Causes skin burns. Pain and discomfort. Tissue damage.

Eye contact: Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage. Liquid, aerosols or vapor are irritating and can cause tearing, reddening and swelling. Corneal edema may give appearance of "blue haze" or "fog" around lights.

Ingestion: May be harmful if swallowed. Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed. May cause an aspiration hazard if swallowed. If swallowed, may be aspirated into the lungs resulting in inflammation and possible fluid accumulation.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Aliphatic amine	Proprietary	30 - 60
Amine adduct	Proprietary	30 - 60
N-Aminoethylpiperazine	140-31-8	10 - 30
Nonylphenol	25154-52-3	5 - 10
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	68953-36-6	1 - 5
Polyoxypropylentriamine	64852-22-8	1 - 5

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. 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. Thoroughly clean shoes before reuse. Get medical attention.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 93 °C (> 199.4 °F)
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
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.
Unusual fire or explosion hazards:	None
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Ammonia. Aldehydes. Acids. Phenolics.

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.
Clean-up methods:	Rinse spill area with water. Wipe up with adsorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling:	Do not taste or swallow. Avoid contact with eyes, skin and clothing. Do not breathe gas/fumes/vapor/spray. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
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 contact Henkel Customer Service at (800) 243-4874.

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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Aliphatic amine	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Amine adduct	None	None	None	None
N-Aminoethylpiperazine	None	None	None	None
Nonylphenol	None	None	None	None
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	None	None	None	None
Polyoxypropylentriamine	None	None	None	None

Engineering controls: Use local exhaust ventilation if the potential for airborne exposure exists.

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.

Skin protection: Chemical resistant, impermeable gloves. Neoprene, Butyl-rubber, or nitrile-rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Blue
Odor: Ammoniacal
Odor threshold: Not available
pH: Not available
Vapor pressure: Not available
Boiling point/range: 137 - 293 °C (278.6 - 559.4 °F)
Melting point/ range: Not available
Specific gravity: 0.99
Vapor density: Not available
Flash point: > 93 °C (> 199.4 °F)
Flammable/Explosive limits - lower: Not available
Flammable/Explosive limits - upper: Not available
Autoignition temperature: Not available
Evaporation rate: Not available
Solubility in water: Soluble
Partition coefficient (n-octanol/water): Not available
VOC content: < 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Will not occur.

Hazardous decomposition products: None

Incompatible materials: Strong oxidizing agents. Strong Lewis acids. Strong mineral acids. Strong bases. Aldehydes. Ketones. Acrylates. Organic halides.

Conditions to avoid: Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aliphatic amine	No	No	No
Amine adduct	No	No	No
N-Aminoethylpiperazine	No	No	No
Nonylphenol	No	No	No
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	No	No	No
Polyoxypropylentriamine	No	No	No

Hazardous components	Health Effects/Target Organs
Aliphatic amine	Allergen, Corrosive, Developmental, Irritant, Mutagen
Amine adduct	No Records
N-Aminoethylpiperazine	Irritant, Corrosive, Allergen
Nonylphenol	Allergen, Corrosive, Irritant, Kidney
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	No Records
Polyoxypropylentriamine	No Records

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: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

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

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Triethylenetetramine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: II

International Air Transportation (ICAO/IATA)

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Triethylenetetramine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: II

Water Transportation (IMO/IMDG)

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine, Triethylenetetramine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: II

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 minimus

CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA 313: None above reporting de minimus

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

WHMIS hazard class: D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: Gary Pierson, Sr. Regulatory Affairs Specialist

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