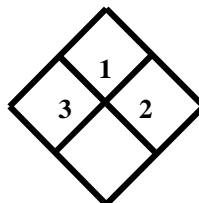


P.O. Box 4980
The Woodlands, TX 77387-4980

8 am to 5 pm Phone: (800) 257-5547
24-Hour Emergency Phone: (800) 328-8501
International Emergency Phone: (409) 727-0831
Asia Pacific Emergency Phone: (65) 6336-6011

Effective Date: 5/17/07**Material Safety Data Sheet**

MSDS No: 5657

1. PRODUCT IDENTIFICATION**Trade Name:** Hardener HV 1258**Chemical Family:** Amine

NFPA RATING

Health:	3
Flammability:	1
Reactivity:	2
Personal Protection:	

HMIS RATING

Synonyms:

RP 1258 HARDENER

Intended Use or Product Type: Adhesive hardener**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				CARCINOGEN STATUS			
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	111-40-0	1,2-Ethanediamine, N-(2-aminoethyl)- Diethylenetriamine Common Name: Concentration	1 ppm	NE	NE	NE	NE	NR	NR	NR
*	112-24-3	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)- Triethylenetetramine Common Name: Concentration	NE	NE	NE	NE	NE	NR	NR	NR
*	1333-86-4	Carbon Black Common Name: Concentration	3.5 mg/m3	NE	3.5 mg/m3	NE	NE	Yes	NR	NR
*	14808-60-7	Quartz (SiO2) Common Name: Concentration	0.05 mg/m3	NE	0.1 mg/m3	NE	NE	Yes	Yes	NR
*	25154-52-3	Phenol, Nonyl- Common Name: Concentration	NE	NE	NE	NE	NE	NR	NR	NR
*	68410-23-1	Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	NE	NE	NE	NE	NE	NR	NR	NR

Effective Date: 5/17/07

	Common Name: Concentration	Polyamide Resin 7.00 - 13.00 % by wt								
*	80-05-7	Phenol, 4,4'-(1-methylethylidene)bis-	NE	NE	NE	NE	TLV 5 mg/m3	NR	NR	NR
	Common Name: Concentration	Bisphenol A 1.00 - 5.00 % by wt								

* = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Corrosive - Causes skin and eye burns. Harmful if absorbed through skin. May cause allergic skin and respiratory reactions.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.

Carcinogenicity (NTP, IARC, OSHA): This product contains carbon black which is classified as a carcinogen by IARC (2B, possibly carcinogenic to humans) and NIOSH.

Chronic: Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury. Overexposure may have effects on developing fetus, kidney, liver, and brain.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Overexposure Effects: Corrosive - causes eye burns. Causes severe skin irritation and may cause skin burns. Can cause allergic respiratory reaction and allergic skin reaction. Harmful if absorbed through skin.

Medical Conditions Aggravated by Exposure: Skin, eye and pulmonary conditions.

Additional Information: Referral to a physician is recommended if there is any question about the seriousness of any injury.

5. FIRE FIGHTING MEASURES

Flash Point: 239°F (115 °C)
Flash Point Method Used: PMCC
Flammable Limits in Air (Lower - % by volume): Not established

Effective Date: 5/17/07

Flammable Limits in Air (Upper - % by volume): Not established**Fire Fighting Extinguishing Media:** Carbon dioxide, dry chemical, foam, water.**Fire Fighting Equipment:** Use self-contained breathing apparatus.**Fire and Explosion Hazards:** Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Remove spillage by absorbing in absorbent material.

7. HANDLING AND STORAGE

Signal Word: Danger!**Precautions:** Corrosive - causes eye burns. Causes severe skin irritation and may cause skin burns. Can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or mist. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury. Overexposure may have effects on developing fetus, kidney, liver, and brain.**Other Handling Information:** Crystalline silica may be generated when machining cured products. Overexposure may create possible cancer and silicosis hazard.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin Protection: Wear impermeable gloves.**Respiratory Protection:** Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.**Eye Protection:** Wear splash-proof chemical goggles.**Engineering Controls:** General mechanical and local exhaust in accordance with ACGIH recommendations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Dark Grey
Odor:	Slight Ammoniacal
Physical State:	Paste
Solubility in Water:	Slight
Vapor Pressure:	1.13 mm Hg at 52°C (126 °F)
Specific Gravity:	1.6 - 1.66 (water = 1)
Boiling Point:	> 450°F (> 232 °C)
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
VOC:	108.721 g/L
pH:	Not Determined

Effective Date: 5/17/07

Percent Volatile: Not determined.

10. STABILITY AND REACTIVITY

Conditions to Avoid: Excessive heat for prolonged periods of time.

Stability: Stable.

Incompatibility: Strong oxidizers, acids and bases.

Hazardous Decomposition Products: Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): Component(s) are slightly toxic, 500 - 5000 mg/kg (rat).

Diethylenetriamine= 1080 - 2330 mg/kg (rat)

Acute Dermal Toxicity (LD50): Component(s) are toxic, 200 - 1000 mg/kg (rabbit).

Diethylenetriamine= 672 - 1240 mg/kg (rabbit)

Sensitization: Causes allergic skin and respiratory sensitivity in some people.

Carcinogenicity: This product contains crystalline silica. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis) and cancer. This product contains carbon black which is classified as a carcinogen by IARC (2B, possibly carcinogenic to humans) and NIOSH.

Skin Irritation: Severe skin irritant.

Eye Irritation: Corrosive. Causes burns.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT: Non-Bulk

Proper Shipping Name: Not Regulated

IATA: Non-Bulk

Proper Shipping Name: Not Regulated

IMDG: Non-Bulk

Proper Shipping Name: Not Regulated

TDG: Non-Bulk

Proper Shipping Name: Not Regulated

Effective Date: 5/17/07

15. REGULATORY INFORMATION**US Federal Regulations:**

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261).

SARA Title III: Section 313 Toxic Chemical List (TCL): This product contains a toxic chemical(s) for routine annual toxic chemical release reporting under section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: Aluminum
Percent in Composition: 30 % by wt
Comment:

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-
Common Name: Bisphenol A
Percent in Composition: 1 - 5 % by wt
Comment:

TSCA Section 8(b) - Inventory Status: All chemical components of this product are in compliance with TSCA inventory requirements.

TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

International Regulations:

Canadian Inventory Status: This product contains components which are included on the Domestic Substances List (DSL) and the Non-Domestic Substances List (NDSL).

Canadian WHMIS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. D1B D2A D2B

State Regulations:

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Chemical Name: Quartz (SiO₂)
Common Name: Crystalline silica
CAS Number: 14808-60-7
Percent in Composition: 0.1 - 1 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Formaldehyde
Common Name: Formaldehyde

Effective Date: 5/17/07

CAS Number: 50-00-0

Percent in Composition: 0.0001 % by wt

Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Arsenic

CAS Number: 7440-38-2

Percent in Composition: 0 % by wt

Comment: Warning! This chemical is known to the State of California to cause cancer and birth defects or other reproductive harm.

Chemical Name: Lead

CAS Number: 7439-92-1

Percent in Composition: 0 % by wt

Comment: Warning! This chemical is known to the State of California to cause cancer and birth defects or other reproductive harm.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Aluminum

CAS Number: 7429-90-5

Comment: Environmental Hazardous Substance

Chemical Name: Limestone

Common Name: Calcium carbonate

CAS Number: 1317-65-3

Comment: Hazardous Substance

Chemical Name: Aluminum hydroxide

Common Name: Hydrated Alumina

CAS Number: 21645-51-2

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines

Common Name: Polyamide Resin

CAS Number: 68410-23-1

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phenol, Nonyl-

Common Name: Nonyl Phenol

CAS Number: 25154-52-3

Comment: Hazardous Substance

Chemical Name: 1,2-Ethanediamine, N-(2-aminoethyl)-

Common Name: Diethylenetriamine

CAS Number: 111-40-0

Comment: Hazardous Substance

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-

Common Name: Bisphenol A

CAS Number: 80-05-7

Comment: Environmental Hazardous Substance

Chemical Name: Silica

Common Name: Fumed Silica

Effective Date: 5/17/07

CAS Number: 7631-86-9
Comment: Hazardous Substance**16. OTHER INFORMATION**

MSDS No:	5657
Approved By:	Dianne Blessing
Title:	EH&S Specialist

Disclaimer: The information and recommendations contained herein are based upon tests in controlled laboratory conditions, are believed to be correct, and are provided for the sole purpose of hazard communication as part of Huntsman's product safety program. This product has not been tested for, and therefore is not recommended or suitable for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended or likely, or for uses for which implantation within the human body is intended, and Huntsman assumes no liability for any such uses.

The information and recommendations contained herein are not intended to constitute performance information concerning the product, which is available in separate technical data sheets available from Huntsman upon request. Users are urged, and are urged to urge others who may come in contact with the product, to obtain and consult data sheets prior to purchase, use, transportation or storage of the product.

HUNTSMAN MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. HUNTSMAN'S LIABILITY IS STRICTLY LIMITED TO REIMBURSEMENT OF BUYER'S PURCHASE PRICE, OR IN HUNTSMAN'S DISCRETION REPLACEMENT, OF THE PRODUCT IN RESPECT OF WHICH SUCH CLAIM IS MADE. HUNTSMAN'S LIABILITY IS STRICTLY LIMITED BY LEGAL NOTICES IN TECHNICAL DATA SHEETS, PRODUCT LITERATURE, AND/OR SALE DOCUMENTS. The foregoing DISCLAIMERS and LIMITATION OF LIABILITY supercede inconsistent or contradictory provisions in Buyer's documents.

USER SHOULD CONSULT A LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENTAL AGENCY TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT. HUNTSMAN DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM HUNTSMAN. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET SHOULD BE DIRECTED TO HUNTSMAN, MANAGER, PRODUCT SAFETY AT THE ABOVE ADDRESS.