

SAFETY DATA SHEETS

This SDS packet was issued with item:

074892212

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

071419548

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

074892196 074892204 074940854

Huntsman Advanced Materials Americas Inc.

HUNTSMAN281 Fields Lane
Brewster, NY 105098am to 4:30pm Phone: (914) 785-3000
24-Hour Health/Environmental Emergency Phone: 1-888-354-3323

Effective Date: 1/29/04

Material Safety Data Sheet

MSDS No: 11741

1. PRODUCT IDENTIFICATION

Trade Name: Aradur 14 BD

Chemical Family: Modified Polyamine

Health	3
Flammability	1
Reactivity	0
Protective Equipment	X

HMIS RATING

Intended Use or Product Type: Liquid Epoxy Hardener

2. COMPOSITION / INFORMATION ON INGREDIENTS**OSHA Hazardous Ingredients:**

ACGIH and OSHA STELs for 1,3-benzenedimethanamine are ceiling concentrations. The OSHA STEL has a skin notation.

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				CARCINOGEN STATUS			
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	1477-55-0	1,3-Benzenedimethanamine Common Name: m-Xylylenediamine	NE	0.1 mg/m ³	NE	0.1 mg/m ³	NE	NR	NR	NR
*	25154-52-3	Phenol, nonyl-	NE	NE	NE	NE	NE	NR	NR	NR
*	25620-58-0	1,6-Hexanediamine, trimethyl- Common Name: Trimethylhexamethylenediamine	NE	NE	NE	NE	NE	NR	NR	NR
*	98-54-4	Phenol, 4-(1,1-dimethylethyl)- Common Name: p-tert Butyl Phenol (PTBP)	NE	NE	NE	NE	TWA 10 mg/m ³	NR	NR	NR

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

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Aradur I4 BD**Huntsman Advanced Materials
Americas Inc.**

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Emergency Overview: Danger! Corrosive to eyes and skin. Harmful if swallowed, inhaled or absorbed through the skin. Can cause allergic skin and respiratory reactions.

Primary Route(s) of Entry: Dermal.

4. FIRST AID MEASURES

Ingestion: If swallowed, immediately give at least 3-4 glasses of water, but do not induce vomiting. If vomiting occurs, give fluids again. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

Skin: For skin contact, under a safety shower, immediately remove contaminated clothing and shoes. Wash affected areas thoroughly with large amounts of water, and soap if available, for at least 15 minutes. Get immediate medical attention. Discard or decontaminate clothing before re-use and destroy contaminated shoes.

Inhalation: If inhaled, remove from area to fresh air. If not breathing, give artificial respiration. Get immediate medical attention. If breathing is difficult, transport to medical care and, if available, give supplemental oxygen.

Eyes: For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. If physician is not available, flush for an additional 15 minutes. Get immediate medical attention.

Overexposure Effects: Overexposure to this material can cause chemical burns to the skin, eyes and respiratory system. May cause allergic skin and respiratory reactions. Can cause damage to liver and thyroid.

Medical Conditions Aggravated by Exposure: Allergy, eczema or skin conditions.

Additional Information: Promptly remove wet contaminated non-impervious clothing, wash before reuse. Destroy contaminated leather and absorbent shoes.

5. FIRE FIGHTING MEASURES

Flash Point: > 130°C (> 266 °F)
Flash Point Method Used: DIN 51758

Fire Fighting Extinguishing Media: Carbon dioxide, foam, dry chemical, water spray.

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: Avoid all personal contact. Take up with absorbent material. Shovel into closable containers. Flush contaminated area with water.

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Americas Inc.**

7. HANDLING AND STORAGE

Precautions: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Wear chemical goggles. Wear impervious gloves. Individuals should wash thoroughly after handling. For industrial use only.

Storage Information: Store in sealed containers in dry area to prevent moisture and carbon dioxide contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Wear protective equipment to prevent exposure and personal contact.

Skin Protection: Wear impervious gloves.

Respiratory Protection: Organic chemical cartridge respirator, if needed.

Eye Protection: Splash-proof chemical goggles. Full face-shield recommended.

Engineering Controls: Good general mechanical ventilation. Local exhaust recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Yellow to Brown Colorless to Pale Yellow
Odor:	Amine
Physical State:	Liquid
Solubility in Water:	Miscible at 20°C (68°F)
Specific Gravity:	1 g/ml
pH:	~ 12 (Dispersion, 50% at 20°C)

Percent Volatile: Nil.

10. STABILITY AND REACTIVITY

Stability: Stable.

Incompatibility: Strong oxidizers and acids.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, aldehydes, nitrogen oxides.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): (Rat) 910-2951 mg/kg (components).

Acute Dermal Toxicity (LD50): Rabbit >2000 mg/kg (components).

Sensitization: May cause skin and respiratory sensitization.

Skin Irritation: Corrosive.

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Aradur 14 BD**Huntsman Advanced Materials
Americas Inc.****Eye Irritation:** Corrosive.**Component Toxicological Information:** p-tert Butyl Phenol can cause skin depigmentation (vitiligo) and systematic damage to liver and thyroid.**12. ECOLOGICAL INFORMATION****Additional Information:** No ecological information available.**13. DISPOSAL CONSIDERATIONS****Waste Disposal Method:** Dispose in accordance with federal, state and local regulations.**14. TRANSPORT INFORMATION****DOT:**

Proper Shipping Name:	Polyamines, liquid, corrosive, n.o.s.
Technical Shipping Name (If n.o.s.):	(m-Xylenediamine, Trimethylhexamethylenediamine)
Hazard Class:	8
ID Number:	UN 2733
Packing Group:	PG III

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 304 - CERCLA:** Not listed.**SARA Title III: Section 313 Toxic Chemical List (TCL):** This product does not contain a toxic chemical for routine annual 'Toxic Chemical Release Reporting' under Sec. 313 (40 CFR 372). This information must be included in all MSDS's that are copied and distributed for this material.**TSCA Section 8(b) - Inventory Status:** Chemical components listed on TSCA Inventory.**TSCA Section 12(b) - Export Notification:** This product contains chemical(s) which is (are) regulated by TSCA 12(b) Regulation and it is required that proper export notification shall be sent to EPA prior to shipping out of the United States of America.

CAS Number: 84852-15-3

Chemical Name: 4-Nonylphenol, branched

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Aradur 14 BD**Huntsman Advanced Materials
Americas Inc.****International Regulations:**

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

State Regulations:

New Jersey Right-to-Know: The following is required composition information:

CAS Number: 25154-52-3
Chemical Name: Nonylphenol

CAS Number: 25620-58-0
Chemical Name: Trimethylhexamethylenediamine

CAS Number: 1477-55-0
Chemical Name: 1,3-Benzenedimethanamine

Generic Name: Modified Polyamine
NJ Registry Number: 29943300001-5877P

CAS Number: 98-54-4
Chemical Name: Phenol, 4-(1,1-dimethylethyl)-

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

CAS Number: 25154-52-3
Chemical Name: Nonylphenol
Comment: Hazardous Substance

CAS Number: 25620-58-0
Chemical Name: Trimethylhexamethylenediamine
Comment: Not on Pennsylvania Hazardous Substance List.

CAS Number: 1477-55-0
Chemical Name: 1,3-Benzenedimethanamine
Comment: Hazardous Substance

CAS Number: 98-54-4
Chemical Name: Phenol, 4-(1,1-dimethylethyl)-
Comment: Environmental Hazard.

CAS Number: Confidential
Generic Name: Modified Polyamine
Comment: Not on Pennsylvania Hazardous Substance List.

16. OTHER INFORMATION

MSDS No: 11741
Prepared By: Lesley McTaggart
Approved By: Kapilow, Lorraine
Title: Manager, Product Safety

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Americas Inc.**

Other Information: For further information, contact Product Safety personnel at (914) 785-3000.

Disclaimer: The following supercedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.



DENTSPLY Professional

Safety Data Sheet

Safety Data Sheet (in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010)

Document Number: 82381-1214
Date Revised: 09 December 2014

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier:

Trade Name (as labeled): Midwest Plus™ Handpiece Cleaner
Part/Item Number: 380140

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Recommended Use: Cleaner, Lubricant
Restrictions on Use: For Professional Use Only.

1.3 Details of the Supplier of the Safety Data Sheet:

Manufacturer/Supplier Name: DENTSPLY Professional
Manufacturer/Supplier Address: 901 West Oakton St.
Des Plaines, IL 60018
Manufacturer/Supplier Telephone Number: 800-989-8826 or 717-767-8502 (Product Information)
Email address: ProfessionalMSDS@dentsply.com

1.4 Emergency Telephone Number:

Emergency Contact Telephone Number: 800-424-9300 Chemtrec

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

GHS Classification:		
Health	Environmental	Physical
Not Hazardous	Not Hazardous	Not Hazardous

EU Classification: None

2.2 Label Elements:

Signal Word: None Required

Hazard Phrases	Precautionary Phrases
None Required	None Required

2.3 Other Hazards: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture:

Hazardous Components	C.A.S. #	EINECS #	Classification	WT %
Non-Hazardous Proprietary Blend	Mixture	Mixture	Not Applicable	100%

The exact concentration is being withheld as a trade secret.

Refer to Section 16 for the full text of the GHS and EU Classifications.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures:

Eye	Flush eyes with large quantities of water, while holding the eyelids apart. Get medical attention if irritation persists.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation develops, get medical attention. Launder clothing before re-use.
Inhalation	Remove victim to fresh air. If irritation occurs, get medical attention.
Ingestion	In the case of unintended ingestion, rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if any adverse effects occur.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed:

May cause mild eye irritation. May cause skin irritation with prolonged contact. Inhalation of vapors or mist may cause upper respiratory irritation.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:

Immediate medical attention should not be required except in cases of high quantities of ingestion or inhalation.

Note to Physicians (Treatment, Testing, and Monitoring): Treat symptomatically.

5. FIRE-FIGHTING MEASURES





5.1 Extinguishing Media: Use water, carbon dioxide, alcohol foam or dry chemical.

5.2 Special Hazards Arising from the Substance or Mixture:

Decomposition may release carbon monoxide and carbon dioxide.

5.3 Advice for Fire-Fighters:



Fire Fighting Procedures:	Use water to cool exposed containers and structures. Fight fire from safe distance or protected location.
Precautions for Fire Fighters:	Do not enter fire area without proper protection. Firefighters should wear full emergency equipment and an approved positive pressure self-contained breathing apparatus. Do not allow run-off from firefighting to enter drains or water courses.

Recommended Protective Equipment for Fire Fighters:			
EYES/FACE	HANDS	RESPIRATORY	THERMAL
			

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Evacuate spill area and keep unprotected personnel away. Avoid contact with skin, eyes or clothing. Avoid breathing mists. Wear appropriate protective clothing.

Recommended Personal Protective Equipment for Containment and Clean-up:			
EYES/FACE	HANDS	RESPIRATORY	SKIN
			

6.2 Environmental Precautions:

Prevent entry into sewers and waterways. Report releases as required by local, state, and national authorities.

6.3 Methods and Material for Containment and Cleaning up:

Contain and collect using an inert absorbent material and place in appropriate containers for disposal. Rinse spill area with water. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

6.4 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Avoid contact with the eyes, skin and clothing. Avoid breathing mists. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Do not reuse containers. Empty containers retain product residues that can be hazardous. Follow all SDS precautions when handling empty containers.

7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Store in a cool, dry, well-ventilated area away from heat, direct sunlight and all sources of ignition. Store away from incompatible materials. Keep container closed to prevent contamination.

7.3 Specific End Use (s): For professional use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:**Occupational Exposure Limits:**

Non-Hazardous Proprietary Blend	United States	None Established
	Germany	None Established
	United Kingdom	None Established
	European Union	None Established

Biological Exposure Limits: None Established

8.2 Exposure Controls:

Appropriate Engineering Controls: Use with adequate local exhaust ventilation to maintain exposure levels below the occupational exposure limits. Use explosion-proof equipment where required.

Individual Protection Measures (PPE):



Specific Eye/face Protection: Chemical safety glasses or chemical splash goggles are recommended to avoid eye contact.

Specific Skin Protection: Wear impervious gloves such as butyl rubber or neoprene gloves to avoid prolonged skin contact.

Specific Respiratory Protection: None should be needed for normal use. If the airborne concentrations are excessive, an approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.

Specific Thermal Hazards: None required.

Recommended Personal Protective Equipment

EYES/FACE	HANDS	RESPIRATORY	SKIN
			

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Appearance:	Water-white sudsy liquid with slightly opaque color.	Explosive limits:	LEL: Not determined UEL: Not determined
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Odor:	Mild odor characteristic of isopropanol.	Vapor pressure (mmHg):	Not determined
Odor threshold:	Not determined	Vapor density:	Not Determined
pH:	6.5	Relative density:	~1.004
Melting/freezing point:	Not determined	Solubility(ies):	Completely miscible
Initial boiling point and boiling range:	80.4-100°C (176.72-212°F)	Partition coefficient: n-octanol/water:	Not determined
Flash point:	Not determined	Auto-ignition temperature:	Not determined
Evaporation rate:	Between 1.5 and 1.75	Decomposition temperature:	Not determined
Flammability (solid, gas):	Not applicable	Viscosity:	Not applicable
Explosive Properties:	Not an explosive	Oxidizing Properties:	Not an oxidizer

9.2 Other Information: None available

10. STABILITY AND REACTIVITY

10.1 Reactivity: None known.
10.2 Chemical Stability: Stable at normal temperatures and conditions.
10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4 Conditions to Avoid: None known
10.5 Incompatible materials: Avoid oxidizing agents.
10.6 Hazardous Decomposition Products: Decomposition may release carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

<p><u>Potential Health Effects:</u></p> <p><u>Eyes:</u> Contact may cause moderate irritation with redness, tearing and stinging.</p> <p><u>Skin:</u> Repeated or prolonged contact may cause irritation, drying, defatting of the skin and dermatitis.</p> <p><u>Ingestion:</u> Ingestion of large amounts may cause gastrointestinal upset.</p> <p><u>Inhalation:</u> Inhalation of vapors may cause cause irritation of the mucous membranes and upper respiratory tract.</p> <p><u>Chronic Health Effects:</u> None known.</p>
<p><u>Irritation:</u></p> <p>Product: Skin irritation (rabbit): Not corrosive. Direct contact can cause mild to severe redness and swelling. Eye irritation (rabbit): 0.1 ml applied to the eye without washing may produce minimal to moderate transient eye irritation.</p>

Corrosivity: This product is not a corrosive material.
Sensitization: No data available. This product is not expected to cause sensitization.
Carcinogenicity: None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH or the EU Directive.
Mutagenicity: No data available. This product is not expected to cause mutagenic activity.
Medical Conditions Aggravated by Exposure: Individuals with pre-existing skin, respiratory, liver and kidney disease may be at increased risk from exposure.
Acute Toxicity Data: Product: Oral Rat LD50: >5.0 g/kg, Dermal Rabbit LD50: ≥ 2.0 g/kg.
Reproductive Toxicity Data: No data available. This product is not expected to cause reproductive harm.
Specific Target Organ Toxicity (STOT): <u>Single Exposure:</u> No data available <u>Repeated Exposure:</u> No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity: No ecotoxicity data available
12.2 Persistence and Degradability: No data available.
12.3 Bio-accumulative Potential: No data available.
12.4 Mobility in Soil: No data available.
12.5 Results of PBT and vPvB Assessment: Not applicable.
12.6 Other Adverse Effects: None

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:
Regulations: Dispose in accordance with all national and local regulations.
Properties (Physical/Chemical) Affecting Disposal: Empty containers retain product residues that can be hazardous. Follow all SDS precautions when handling empty containers.
Waste Treatment Recommendations: Dispose in accordance with national and local regulations.

14. TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
DOT	None	Not Regulated	None	None	Not applicable
ADR/RID	None	Not Regulated	None	None	Not applicable
IMDG	None	Not Regulated	None	None	Not applicable
IATA/ICAO	None	Not Regulated	None	None	Not applicable

14.6 Special Precautions for User: Not applicable.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Federal Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act (TSCA): This product is an approved drug and not subject to chemical notification requirements.

Clean Water Act (CWA): This material is not regulated under the Clean Water Act.

Clean Air Act (CAA): This material is not regulated under the Clean Air Act.

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard:	No	Pressure Hazard:	No
Delayed Hazard:	No	Reactivity Hazard:	No
Fire Hazard:	No		

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
None		

State Regulations

California: This product contains the following substances known to the state of California to cause cancer and/or reproductive toxicity:

Components	C.A.S. #	WT %
None		

International Regulations

Canadian Workplace Hazardous Materials Information System (WHMIS): Medical devices are not subject to WHMIS.

Canadian Environmental Protection Act: This product is a medical device and not subject to chemical notification requirements.

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

European Inventory of Existing Chemicals (EINECS): This product is a medical device and not subject to chemical notification requirements.

EU REACH: All components requiring registration have been pre-registered.

Australian Inventory of Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

China Inventory of Existing Chemicals and Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

Japanese Existing and New Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

Korean Existing Chemicals List: This product is a medical device and not subject to chemical notification requirements.

Philippine Inventory of Chemicals and Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

15.2 Chemical Safety Assessment: None required.

16. OTHER INFORMATION

HMIS Hazard Rating:

Health – 1 Flammability – 0 Physical Hazard – 0

Full text of Classification abbreviations used in Section 2 and 3:

None

Date Revised: 09 December 2014

Revision Summary: Converted MSDS to Reach SDS. Updated all sections.

Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.