

Date Prepared: 08/30/02  
Supersedes: 08/01/01  
Product Name: Duraguard 220 (Part B-Hardener)

# ChemMasters

## Material Safety Data Sheet

### 1. Chemical Product and Company Information

**Product Name:** Duraguard 220 (Part B-Hardener)

**Product Description:** Duraguard 220 is a Two-Component, 100% Solids, Chemical Resistant, Epoxy Novalac Coating

**ChemMasters**  
300 Edwards Street  
Madison, Ohio 44057  
440-428-2105

In Case of Emergency Contact:  
CHEMTREC 800/424-9300

### 2. Composition / Information on Ingredients

Hazardous Components	CAS #	Exposure Limits			% by Wt
		OSHA(PEL/TWA)	ACGIH (TLV/TWA)	OTHER	
Nonyl Phenol	84852-15-3	NE	NE	—	*
M-Xylene Diamine	1477-55-0	0.1 mg/m <sup>3</sup> Skin	0.1 mg/m <sup>3</sup> Skin	—	*
Isophorone Diamine	2855-13-2	NE	NE	—	*
Modified Alkyl Amine	*	NE	NE	—	*
Polyglycol	*	NE	NE	—	*

\* Trade Secret

### 3. Hazards Identification

#### WARNING

#### CORROSIVE LIQUID

Causes eye burns

Causes skin burns and/or allergic skin reaction

May cause allergic respiratory reaction

#### Potential Health Hazards - Acute

**Eye:** May cause chemical burn—damage irreversible.

**Skin:** Sensitizer— may cause allergic reaction which can be severe in certain individuals. Moderately toxic, may cause chemical burns.

**Inhalation:** May cause headaches, nausea, dizziness and respiratory irritation. Sensitizer— may cause allergic respiratory reaction.

**Ingestion:** No specific information available. Moderately toxic. May cause gastrointestinal irritation, ulceration and/or burns of mouth and throat.

#### Potential Health Effects - Chronic

##### Carcinogenicity:

**NTP**  
NO

**IARC Monographs**  
NO

**OSHA Regulated**  
NO

### 4. First Aid Measures

**Eye:** Immediately flush with plenty of water for at least 15 minutes. Get medical attention.

**Skin:** Flush immediately with plenty of water for at least 15 minutes while removing contaminated clothing.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Do NOT induce vomiting. Give victim a glass of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

**SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST**

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## 5. Fire Fighting Measures

**Flash Point** (method used): 203°F (TCC)

**Flammable Limits** (% volume in air): **Lower** = Not applicable    **Upper** = Not applicable

**Auto Ignition Temperature:** Not applicable

**Extinguishing Media:** Ignition will give rise to a Class B fire. Dry chemicals, CO<sub>2</sub>, Halon, water spray or foam.

**Hazard Combustion Products:** Carbon dioxide, carbon monoxide and/or oxides of nitrogen.

**Fire Fighting Instructions:** Remove all ignition sources. Wear self contained breathing apparatus and complete personal protective equipment when entering confined areas where potential exposure to vapors or products of combustion exists.

## 6. Accidental Release Measures

**Spill:** Absorb with inert material, then place in chemical waste container for later disposal.

## 7. Handling and Storage

**Handling:** Use with adequate ventilation. Avoid contact with skin and eyes. Always use good industrial hygiene practices and safety guidelines when dealing with this potentially hazardous product.

**Storage:** Keep containers closed and store in a dry, well ventilated area.

## 8. Exposure Controls / Personal Protection

**Exposure Controls:** Mechanical exhaust should be used. A source of clean water should be available for flushing eyes and skin.

**Personal Protection:** Protective clothing, chemical splash goggles, rubber gloves and a vapor respirator.

## 9. Physical and Chemical Properties

**Appearance:** Amber liquid

**Odor:** Ammoniacal odor

**Boiling Point:** >392°F

**Melting Point:** No Data

**Vapor Pressure** (mm/Hg): 0.30075

**Vapor Density** (Air = 1): >1

**Solubility in Water:** <1%

**Specific Gravity** (H<sub>2</sub>O = 1): 1.01

**Evaporation Rate** (n-Butyl Acetate = 1): Not applicable

**pH:** Alkaline

## 10. Stability and Reactivity

**Chemical Stability:** Stable

**Conditions to Avoid:** Excessive heat

**Incompatibility** (materials to avoid): Contamination with strong acids, bases, epoxy resins or isocyanates can cause polymerization.

**Hazardous Decomposition or By-products:** Thermal decomposition may include carbon monoxide, carbon dioxide and/or oxides of nitrogen.

**Hazardous Polymerization:** Will not occur

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## 11. Toxicological Information

Components	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Nonyl Phenol	1.3 g/kg	2.0 g/kg	>2 mg/l
M-Xylene Diamine	930 mg/kg	2000 mg/kg	700 ppm/1 Hour
Isophorone Diamine	1030 mg/kg	No Data Available	No Data Available
Modified Alkyl Amine	No Data Available	No Data Available	No Data Available
Polyglycol	No Data Available	No Data Available	No Data Available

## 12. Ecological Information

This product contains Nonyl Phenol which is a Marine Polution.

## 13. Disposal Considerations

Dispose of in accordance with all federal, state and local regulations. If uncertain of local regulations in your area, contact the proper environmental authorities for disposal.  
Under RCRA 40 CFR 261 this material is hazardous waste number D002.

## 14. Transportation Information

**For U S National, International & Air Shipments**

**Shipping Description:** Corrosive Liquids N.O.S. (Modified Polyamine), 8, UN1760, III

**Emergency Response Guide Number:** 154

**Hazard Class:** Corrosive

## 15. Regulatory Information

**OSHA:** This material is hazardous by definition of Hazardous Communications Standard (29 CFR 1910.1200)

**CERCLA Reportable Quantity:** Not applicable

**SARA Title III:**

**Section 311/312 hazard categories:** acute health, delayed health

**Section 313 reportable ingredients:**

Components	CAS #	Maximum %
None	—	—

## 16. Other Information

**MSDS Status:** Revised 08/30/02

Industrial Abbreviation Legend on page 4 of this MSDS.

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### Industrial Abbreviation Legend

ACGIH	American Conference of Governmental Industrial Hygienists	mg/m <sup>3</sup>	milligrams per cubic meter
CAA	Clean Air Act (EPA)	NIOSH	National Institute for Occupational Safety and Health
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980 (Superfund) (EPA)	NTP	National Toxicology Program
CNS	Central Nervous System	OSHA	Occupational Safety and Health Administration
CWA	Clean Water Act (EPA)	PEL	Permissible Exposure Limit
DOT	Department of Transportation	ppm	parts per million
EPA	Environmental Protection Agency	RCRA	Resource Conservation and Recovery Act (EPA)
g/kg	grams per kilogram	SARA	EPA's Superfund Amendment and Reauthorization Act (EPA)
IARC	Internal Agency for Research on Cancer	STEL	Short-Term Exposure Limit, ACGIH terminology
LC50	Lethal Concentration in which 50% of the test animals are expected to die	TLV	Threshold Limit Value
LD50	Lethal Dose in which 50% of the test animals are expected to die	TWA	Time-Weighted Average

### **THIS PRODUCT IS FORMULATED AND LABELED FOR INDUSTRIAL AND COMMERCIAL APPLICATION ONLY**

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