

Material Safety Data Sheet

Revision Date: June 6, 2005

Section 1. Product Identification

Manufacturer: Polymer Composites, Inc.
1871 Lake Place
Ontario, CA 91761
(909) 673-1007 • Fax: (909) 673-1605

Trade Name: **MAX MCR PART A RESIN, MAX FCR PART A RESIN**
Chemical Family: Modified Bisphenol A Epoxy Resin Filled
Hazard Rating: Health = **1**, Fire = **0**, Reactivity = **0**
(Rating: **0** = None, **4** = Extreme)

Section 2. Product Components

Hazardous Component/s	%	OSHA PEL	ACGIH TLV	CAS #
Phenol, 4- (1-methylethylidene) Bis, Polymer with (Chloromethane) Oxerane	70 - 100	•	•	25068-38-6
Calcium Carbonate	0-20	Dispersed – will not pose dust hazard		1317-65-3
Glycider Ether Modified Organic Pigment***	0-10	•	•	Proprietary
	0-10	Dispersed – will not pose dust hazard		Proprietary

- No established standards at the time of publication
- ***Dispersed in heavy liquid resin and will not pose a dust hazard (Carbon Black None Conductive)

Section 3. Physical Data

Specific Gravity (Water = 1)	-	1.10
Vapor Pressure (mm Hg)	-	<0.01
Vapor Density	-	Heavier than air
Evaporation Rate	-	Slower than butyl acetate
% VOC	-	0.0
Boiling Point	-	>200°C
Solubility in Water	-	<0.01%
Appearance	-	Clear or Colored liquid
Odor	-	Characteristic ester odor

Section 4. Fire and Explosion Data

Flash Point	-	>200°F (COC, SETAFLASH Method)
Extinguishing Media	-	Use Carbon Dioxide or dry chemicals
Flammable Limits	-	LEL = NA UEL = NA

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Special Fire Fighting Procedures:

Remove all ignition sources. Wear self-contained breathing apparatus and complete protective equipment when confined to areas where potential for exposure to vapors or products of combustion exists.

Section 5. Reactivity Data

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|---------------------------------------|--|
| Stability | - Stable |
| Conditions to Avoid | - Prolonged exposure to extreme heat and direct sunlight |
| Materials to Avoid | - Amines, Strong mineral acids, caustic acid, peroxides and other oxidizers |
| Hazardous Decomposition or By-Product | - Fumes produced when heated to decomposition may include carbon monoxide, carbon dioxides and other oxides of nitrogen. |
| Hazardous Polymerization | - May occur if mixed with catalyst in large mass if stored at high temperature for prolonged periods. |
| Conditions to Avoid | - Do not catalyze in large mass or store above 100°F. |

Section 6. Hazard Data

Effects of Overexposure

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|---------------------------------|---|
| Indigestion | - Do not take internally. May cause gastrointestinal irritation. Slight toxicity. |
| Skin Contact | - Low irritation factor but may cause allergic reaction. |
| Eye Contact | - Low to moderate irritation factor but may cause retinal irritation. |
| Inhalation | - May cause irritation to upper respiratory tract, nausea, and dizziness. |
| Chronic Effects of Overexposure | - No specific information available. |

Emergency First Aid Treatment

- | | |
|-----------------|---|
| Ingestion | - If appreciable amounts swallowed, seek medical attention. |
| Skin Contact | - Wash with warm water and mild soap. Remove and wash contaminated clothing. Seek medical attention if rash develops. |
| Eye Contact | - Flush with water for at least 15 minutes. Do not rub eyes. Seek immediate medical attention. |
| Inhalation | - Remove to fresh air. If breathing has stopped, call 911, administer artificial respiration or compressed oxygen if available. |
| Carcinogenicity | - None Established. (Substance present at a concentration of 0.1% or more classified as a carcinogen by IARC, NTP or OSHA) |

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Section 7. Precautions for Safe Handling and Use

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| Steps to be taken in case material is released or spilled | - Prevent spills from entering waterways. Will not flow |
| Waste disposal method | - Dispose of material per all Federal, State and Local regulations. |
| Storing | - Store in original container away from heat and direct sunlight. |

Section 8. Control Measures

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| Respiratory Protection | - Not normally needed. Recommended if material is to be heated or atomized via aerosol or other atomizing equipment. OSHA approved organic vapor mask should be worn if no ventilation is present. |
| Protective Gloves | - Recommended as a general practice: Industrial Grade, impervious glove is suggested when handling this material. |
| Eye and Face Protection | - Chemical splash goggles. |
| Other Protective Equipment | - For operation where personal contact can occur: use chemical face shield, impervious body covering and steel toe boots. A safety shower and eye wash facility should be available. |

Section 9. Shipping and Regulatory Classifications

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|-------------------|--|
| DOT Shipping Name | - Not Applicable |
| DOT Hazard Class | - Not Regulated |
| DOT UN Number | - Not Applicable |
| SARA/Title III | - None |
| Other Information | - Does not contain any California Prop. 65 designated chemicals. This product does not contain chemicals that deplete the ozone layer. |

Disclaimer of Liability

The information cited here in is based on information available at the time of publication.

The manufacturer of this product or its direct representatives makes no warranties, express or implied as to its accuracy and assumes no liability arising from its use by others.

Compliance with all applicable Federal, State and Local laws and regulations remains the responsibility of the user.

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Section 1. Product Identification

Manufacturer:

Polymer Composites, Inc.
1871 Lake Place
Ontario, CA 91761
(909) 673-1007 • Fax: (909) 673-1605Trade Name: **MAX MCR PART B HARDENER, MAX FCR PART B HARDENER**
Chemical Family: Amine Modified Curing Agent
Hazard Rating: Health = **2**, Fire = **1**, Reactivity = **1**
(Rating: **0** = None, **4** = Extreme)

Section 2. Product Components

Hazardous Component/s	%	OSHA PEL	ACGIH TLV	CAS #
N-Aminoethylpiperazine	15 - 30	•	•	140-31-8
Cyclohexamine	15 - 30	•	•	Proprietary
Para-Nonylphenol	15 - 40	•	•	84852-15-3
Modified Aliphatic Amine	40 - 60	•	•	Proprietary

- No established standards at the time of publication

Section 3. Physical Data

Vapor Pressure (mm Hg)	-	<2.01
Density	-	Heavier than air
Evaporation Rate	-	Slower than Butyl Acetate
% VOC (Reportable)	-	0.0
Boiling Point	-	>200°C
Solubility in Water	-	Partial
Appearance	-	Transparent brown
Odor	-	Characteristic ammonia odor

Section 4. Fire and Explosion Data

Flash Point	-	383°F (Pensky-Martin closed cup method)
Extinguishing Media	-	Use Carbon Dioxide or dry chemicals
Flammable Limits	-	LEL = NA UEL = NA
Fire Hazard Classification	-	(OSHA / NFPA) Class IIIB

Special Fire Fighting Procedures:

Remove all ignition sources. Wear self-contained breathing apparatus and complete protective equipment when confined to areas where potential for exposure to vapors or products of combustion exists.

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Section 5. Reactivity Data

Stability	- Stable
Conditions to Avoid	- None
Materials to Avoid	- Epoxy, isocyanate bearing compounds, strong mineral acids, caustic acid
Hazardous Decomposition or By-Product	- Fumes produced when heated to decomposition may include carbon monoxide, carbon dioxide, and other oxides of nitrogen. Ignition may result in Class B fire.
Hazardous Polymerization	- May occur if mixed with epoxy in large mass or if stored at high temperature for prolonged periods.
Conditions to Avoid	- Do not mix with epoxy in large mass or store above 100°F.

Section 6. Hazard Data

Effects of Overexposure

Indigestion	- Do not take internally. May cause gastrointestinal irritation.
Skin Contact	- Moderate irritation factor but may cause allergic reaction.
Eye Contact	- High irritation factor but may cause retinal damage.
Inhalation	- May cause irritation to upper respiratory tract.
Chronic Effects of Overexposure	- No specific information available.

Symptoms of Overexposure

- Skin contact of undiluted product may cause irritation and may cause burns or necrosis.
- Eye contact of undiluted product will cause immediate pain and irritation. Burns of the eye may cause blindness. Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorb into the eye tissue. Corneal edema may give rise to perception of "blue haze" or "Fog" around light. The effect is transient and has no known residual effect.
- Inhalation may cause coughing and chest pains may occur.
- Ingestion may cause headaches, nausea and vomiting.

Emergency First Aid Treatment

Ingestion	- If appreciable amounts swallowed, seek medical attention.
Skin Contact	- Wash with warm water and mild soap. Remove and wash contaminated clothing. Seek medical attention if rash develops.
Eye Contact	- Flush with water for at least 15 minutes. Do not rub eyes. Seek immediate medical attention.
Inhalation	- Remove to fresh air. If breathing has stopped, call 911, administer artificial respiration or compressed oxygen if available.
Carcinogenicity	- (Substance present at a concentration of 0.1% or more classified as a carcinogen by IARC, NTP or OSHA): None Established.

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Section 7. Precautions for Safe Handling and Use

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|---|--|
| Steps to be taken in case material is released or spilled | - Prevent spills from entering waterways. Absorb with inert absorbent. |
| Waste disposal method | - Dispose of material per all Federal, State and Local regulations. |
| Storing | - Store in original container away from heat and direct sunlight. |

Section 8. Control Measures

- | | |
|----------------------------|--|
| Respiratory Protection | - NIOSH approved cartridge. Highly recommended if material is to be heated or atomized via aerosol or other atomizing equipment. OSHA approved organic vapor mask should be worn if no ventilation is present. |
| Protective Gloves | - Recommended as a general practice: Industrial Grade, impervious glove is suggested when handling this material. |
| Eye and Face Protection | - Chemical splash goggles. |
| Other Protective Equipment | - For operation where personal contact can occur: use chemical face shield, impervious body covering and steel toe boots. A safety shower and eye wash facility should be available. |

Section 9. Shipping and Regulatory Classifications

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|----------------------------|--|
| DOT Non-Bulk Shipping Name | - AMINES, LIQUID CORROSIVE, NOS (NONYLPHENOL/ CYCLOALIPHATIC AMINE); 8; UN 2735; PG III |
| IMO Shipping Data | - AMINES, LIQUID CORROSIVE, NOS (NONYLPHENOL/ CYCLOALIPHATIC AMINE); 8; UN 2735; PG III, MARINE POLLUTANT, (NONYLPHENOL) IMDG PAGE 8109-2; F.P. 122.8 C; PLACARDED CORROSIVE; HAZMAT STCC = 4935601; EMS NO:8-05; MFAG: 32 |
| ICAO/IATA shipping Data | - AMINES, LIQUID CORROSIVE, NOS (NONYLPHENOL/ CYCLOALIPHATIC AMINE); 8; UN 2735; PG III; F.P. 122.8 C; SHIPMENT PER CFR 171.11 |
| EPA SARA/Title III | - 311: None; 312: IMMEDIATE HEALTH HAZARD |
| Other Information | - Does not contain any California Prop. 65 designated chemicals. This product does not contain chemicals that deplete the ozone layer (ODC). All components are listed in the TSCA chemical substance inventory. |

Disclaimer of Liability

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