

Material Safety Data Sheet Revision Date: 08/12

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 Print Date:
 08/22/12

 Version 3.0
 MSDS Identification:
 3500 Grout - Part B
 Epoxy Curing Agent

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Name | : | 3500 Grout - Part B |
|----------------------------|----|--|
| Product Use Description | : | Epoxy Curing Agent |
| Company | : | Protective Floorings and Linings A Division of Milamar Coatings, LLC 311 N.W. 122nd St, Suite 100 Oklahoma City, OK 73114 |
| Telephone | : | 405-755-8448 |
| Emergency Telephone Number | r: | ChemTel 800-255-3924 or 813-248-0585 (International) |

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Ingredients 1 | % Wt. | Symbol | CAS No. | EC No. | R-phrases |
|----------------------------|-------|--------|----------|-----------|-------------|
| Diethylenetriamine | 65-75 | C | 111-40-0 | 203-865-4 | 21/22-34-43 |
| 4,4'Isopropylidenediphenol | 25-35 | Xi | 80-05-7 | 201-245-8 | 36/37/38-43 |

See Section 15 for labelling risk phrases and section 16 for others.

Chemical Family: Aliphatic Amines

3. HAZARDS INFORMATION

| Emergency Ov | verview | | | | | | | |
|----------------|--------------------------------|------------|--|--|--|--|--|--|
| 0 9 | Harmful if swallowed. | | | | | | | |
| | Harmful in contact with skin. | | | | | | | |
| | Corrosive. | | | | | | | |
| | Keep away from heat and sou | irces of i | gnition. | | | | | |
| | Severe skin irritant. | | | | | | | |
| | Severe eye irritant. | | | | | | | |
| | May cause sensitization by inl | | | | | | | |
| | May cause sensitization by sk | in conta | ct. | | | | | |
| Potential Heal | th Effects | | | | | | | |
| | Inhalation | : | Inhalation of aerosol may cause irritation to the upper respiratory tract. Can cause severe eye, skin and respiratory tract burns. | | | | | |
| | Eye Contact | : | Causes eye burns. May cause blindness. Severe eye irritation. | | | | | |
| | Skin Contact | : | Harmful in contact with skin. Causes skin burns. Symptoms of overexposure my be headache, dizziness, tiredness, nausea and vomiting. | | | | | |
| | Ingestion | : | Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well | | | | | |

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| | | | | | as a danger of perforation of the esophagus and the stomach. |
| | Ch | nronic Health | Hazard | : | This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas. |
| | Exposure Guideline | es | | | |
| | Та | rget Organs | | : | Skin. Eyes. Respiratory system. |
| | Aggravated Medica | al Condition | | : | Eye disease, skin disorders and allergies. Adverse skin effects (such as rash, irritation or corrosion). Adverse eye effects (such as conjunctivitis or corneal damage). Asthma. Adverse respiratory effects (such as cough, tightness of chest or shortness of breath). |
| 4. FIRST / | AID MEASURES | | | | |
| | General Advice | | | : | Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be initiated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately |
| | Eye Contact | | | : | Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses. |
| | Skin Contact | | | : | Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Wash off immediately with plenty of water for at least 20 minutes. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation. |
| | Ingestion | | : | : | Prevent aspiration of vomit. Turn victim's head to the side. |
| | Inhalation | | | : | Move to fresh air. |
| 5. FIRE-F | IGHTING MEASU | URES | | | |
| | Suitable Extinguish | ning Media | | : | Alcohol-resistant foam. Carbon Dioxide (CO2). Dry Chemical. Dry Sand. Limestone Powder. |
| | Specific Hazards | | | : | May generate ammonia gas. May generate toxic nitrogen oxide gases. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes. |
| | Special Protective | Equipment F | or Fire Fighters | : | Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary. |

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| | Further information | : | Do not allow run-off from fire fighting to enter drains or water courses |
| 6. ACCIDI | ENTAL RELEASE MEASU | IRES | |
| | Personal Precautions | : | Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye / face protection. Evacuate personnel to safe areas. |
| | Environmental Precautions | : | Construct a dike to prevent spreading. |
| | Methods For Clean-Up | : | Contact Protective Floorings and Linings for advice. Place in appropriate chemical waste container. |
| | Additional Advice | : | If possible, stop flow of product. |
| 7. HANDL | ING AND STORAGE | | |
| | Handling | : | Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Avoid contact with skin and eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke. |
| | Storage | : | Store in steel containers preferably located outdoors, above ground, and surroundec by dikes to contain spills or leaks. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. |
| | Technical Measures / Precaut | ions : | Do not store in reactive metal containers. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Engineering Measures | : | Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits. |
|---|---|--|
| Personal Protective Equipment Respiratory Protection | : | Not required for properly ventilated areas. |
| Hand Protection | : | Neoprene gloves. Butyl-rubber gloves. Nitrile Rubber. Impervious Gloves. The breakthrough time of the selected glove(s) must be greater than the intendec use period. |
| Eye Protection | : | Full face shield with goggles underneath. Chemical resistant goggles must be worn. |

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| Skin And Body Protection : | Slicker Suit Impervious Clothing Full Rubber Suit (rain gear). Rubber or Plastic Boots. Long sleeve shirts and trousers without cuffs. |
|--|---|
| Environmental Exposure Controls : | Construct a dike to prevent spreading. |
| Special Instructions For : Protection And Hygiene | Discard contaminated leather articles. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet. |

Exposure Limit(s)

| Diethylenetriamine (DETA) | Time Weighted Average (TWA): ACGIH | 1 ppm | |
|---------------------------|---|-------|---------|
| Diethylenetriamine (DETA) | Recommended Exposure Limit (PEL): NIOSH | 1 ppm | 4 mg/m3 |
| Diethylenetriamine (DETA) | Time Weighted Average (TWA): OSHA Z1A | 1 ppm | 4 mg/m3 |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Form | : | Liquid. |
|-----------------------|---|---|
| Color | : | Amber. |
| Odor | : | Ammoniacal. |
| Relative Density | : | 1.03 (water = 1). |
| Density | : | 64.301 lb/ft3 (1.03 g/cm3) at 70 degrees F (21 degrees C) |
| рН | : | Alkaline. |
| Boiling Point / Range | : | > 392 degrees F (.200 degrees C) |
| Flash Point | : | 230 degrees F (110 degrees C) |
| Water Solubility | : | 0.14 g/l. |

10. STABILITY AND REACTIVITY

| Stability | : | Stable under normal conditions. |
|--------------------|---|--|
| Materials To Avoid | : | Organic acids (i.e. acetic acid, citric acid etc.). Mineral Acids. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Caution! N-Nitrosamines, may of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Nitrous acid and other nitrosating agents. Reactive metals (e.g. sodium, calcium, zinc etc.). |

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| | | | Materials reactive with Oxidizing agents. | hydroxyl compounds. |
| Hazardous Decom | position Pro | ducts : | Nitric Acid. Ammonia. Nitrogen oxides (NOx) Nitrogen oxide can rea Carbon Monoxide (CO Carbon Dioxide (CO2) Aldehydes. Nitrosamine. | act with water vapors to form corrosive nitric acid.)). |

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard

| Ingestion | : | LD 50 : >1,080 mg/kg Species: Rat |
|------------------------------|-----------|--|
| Inhalation | : | No data is available on the product itself. |
| Skin | : | LD50 : 1,090 mg/kg Species : Rabbit. |
| Eye Irritation / Corrosion | : | Severe eye irritation. |
| Acute Dermal Irritation / Co | rrosion : | Severe skin irritation. |
| Sensitization | : | Component has caused skin and respiratory sensitization in humans. |

12. ECOLOGICAL INFORMATION

| Ecotoxicity Effects | | | |
|---------------------|-----------------------------|---|---|
| | Aquatic Toxicity | : | No data is available on the product itself. |
| | Toxicity to other organisms | : | No data available. |
| Persistence Ar | nd Degradability | | |
| | Mobility | : | No data available. |
| | Bioaccumulation | : | No data available on the product itself. |

13. DISPOSAL CONSIDERATIONS

| Waste from residues / unused products | : | Contact supplier if guidance is required. |
|---------------------------------------|---|---|
| Contaminated Packaging | : | Dispose of container and unused contents in accordance with federal, state, and local requirements. |

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14. TRANSPORT INFORMATION

| CFR | Proper Shipping Name Class UN / ID No. Packing Group | : | Amines, liquid, corrosive, n.o.s. (Diethylenetriamine(DETA)) 8 UN2735 III |
|------|---|-------------|--|
| ΙΑΤΑ | Proper Shipping Name Class UN / ID No. Packing Group | : | Amines, liquid, corrosive, n.o.s. (Diethylenetriamine(DETA)) 8 UN2735 III |
| IMDG | Proper Shipping Name Class UN / ID No. Packing Group | : : : | AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine(DETA)) 8 UN2735 III |
| СТС | Proper Shipping Name Class UN / ID No. Packing Group | : : : | AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine(DETA)) 8 UN2735 III |

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es) Corrosive. Sensitizer.

| Country | Regulatory List | Notification |
|-------------|-----------------|--|
| USA | TSCA | Included on Inventory |
| EU | EINECS | Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer. |
| Canada | DSL | Included on Inventory. |
| Australia | AICS | Included on Inventory. |
| Japan | ENCS | Included on Inventory. |
| South Korea | ECL | Included on Inventory. |
| China | SEPA | Included on Inventory. |
| Philippines | PICCS | Included on Inventory. |

EPA SARA Title III Section 312 (40 CFR 370) Hazard Communication: Acute Health Hazard

:

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: Phenol, 4,4'-(1-methylethylidene)bis-

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65):

This product does not contain any chemical known to the State of California to cause cancer, birth defects or any other harm.

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WHMIS Hazard Classification: Toxic Material Causing Other Toxic Effects, Corrosive Material.

| Canadian Classification | : | E: Corrosive materials; D2B: Toxic materials causing other effects |
|--|---|---|
| Risk Phrase(s) | : | Risk of serious damge to eyes. Irritating to skin. May cause sensitisation by skin contact |
| Precationary and First Aid Measure(s) | : | Wear suitable protective clothing, gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water |
| Other Information | : | None |

16. OTHER INFORMATION

| HMIS Rating | Health Flammability Physical Hazard | : : | 3 1 0 | |
|-------------|---|--------|--|--|
| Prepared By | | : | Protective Floorings and Linings. EH&S Product Safety Department | |
| | | | ¹ Classified according to: *29 CFR 1910,1200,1915,1916,1917 *Mass, right-to-know law(ch. 40,M.G.LO 111F) | |
| | | | *Canadian WHMIS regulations *67/548/EEC(29th Adaption) and 99/45EC | |

*Worksafe Austialia (NOHSC: 1008(1999))