



Safety Data Sheet Morricite Hardener M23-200

Version 1.0
Date: 04/07/2015

1. Product and Company Identification

Product Name : Morricite Hardener M23-200 - Part B
Product Description : Curing Agent
Manufacturer/ Importer/Distributor : Master Terrazzo Technologies
8000 Bristol Pike-Levittown, PA
P.O. Box 226
Bristol, PA 19007
Telephone : 1-215-949-1474
Fax : 1-215-949-9422
Emergency telephone Number : Chemtel-800-255-3924
Contract #MIS0004752

2. Hazard Identification

GHS classification

Acute toxicity - Oral Category 4
Acute toxicity - Dermal Category 3
Skin corrosion - Category 1B
Serious Eye Damage - Category 1
Skin sensitization - Category 1
Reproductive toxicity - Category 2

GHS label elements

Hazard pictograms/symbols



Signal Word: **Danger**

Hazard Statements:

H302:Harmful if swallowed.
H311:Toxic in contact with skin.
H314:Causes severe skin burns and eye damage.
H317:May cause an allergic skin reaction.
H361:Suspected of damaging fertility or the unborn child

Precautionary Statements:

- Prevention :
- P201:Obtain special instructions before use.
 - P202:Do not handle until all safety precautions have been read and understood.
 - P261:Avoid breathing dust/fume/gas/mist/vapors/spray.
 - P264:Wash hands thoroughly after handling.
 - P270:Do not eat, drink or smoke when using this product.
 - P272:Contaminated work clothing should not be allowed out of the workplace.
 - P280:Wear protective gloves/protective clothing/eye protection/face protection.
 - P281:Use personal protective equipment as required.
- Response :
- P301+P312 :IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 - P301+P330+P331 :IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 - P303+P361+P353 :IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P304+P340 :IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - P305+P351+P338 :IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P308+P313 :IF exposed or concerned: Get medical advice/attention.
 - P310 :Immediately call a POISON CENTRE or doctor/physician.
 - P333+P313 :If skin irritation or rash occurs: Get medical advice/attention.
 - P363 :Wash contaminated clothing before reuse.
- Storage :
- P405:Store locked up.
- Disposal :
- P501:Disposal of contents/container to be specified in accordance with regulations.

Hazards not otherwise classified

- Harmful if swallowed.
- Toxic in contact with skin.
- Corrosive
- Causes severe skin burns and eye damage.
- May cause sensitization by skin contact.
- Reproductive hazard.

3. Composition/ Information on Ingredients

Components	CAS Number	Concentration (Weight)
Nonyl Phenol	84852-15-3	25% - 30 %
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)-	9046-10-0	25% - 30 %
Aliphatic Amines	Not Available	40% - 50 %

CHEMICAL FAMILY: Amine

4. First Aid Measures

General advice	: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
Eye contact	: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.
Skin contact	: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.
Ingestion	: Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Prevent aspiration of vomit. Turn victim's head to the side.
Inhalation	: Move to fresh air.
Most important symptoms/effects – acute and delayed	: Eye disease. Skin disorders and Allergies.

5. Fire-Fighting Measures

Suitable extinguishing media	: Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemical. Dry sand. Limestone powder.
Specific hazards	: Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Do not allow run-off from fire fighting to enter drains or water courses. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.
Special protective equipment	: Avoid contact with the skin. A face shield should be worn. Use personal for fire-fighters protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
Further information	: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations., Do not allow run-off from fire fighting to enter drains or water courses.

6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures	: Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.
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Environmental precautions	: Do not allow spill to enter into sewers or waterways. Use appropriate containment to avoid environmental contamination. Do not allow spill to enter into sewers or waterways. Use appropriate containment to avoid environmental contamination. Construct a dike to prevent spreading.
Methods for cleaning up	: Approach suspected leak areas with caution. Contact Master Terrazzo Technologies' Emergency Response Center for advice. Place in appropriate chemical waste container.
Additional advice	: If possible, stop flow of product.

7. Handling and Storage

Handling

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. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage

Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

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	: Butyl-rubber Nitrile rubber. Neoprene gloves. Impervious gloves. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	: Full face shield with goggles underneath.
Skin and body protection	: Impervious clothing. Rubber or plastic boots. Slicker Suit.

Environmental exposure controls	: Do not allow spill to enter into sewers or waterways. Use appropriate containment to avoid environmental contamination.
Special instructions for protection and hygiene	: Discard contaminated leather articles. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash hands at the end of each workshift and before eating, smoking or using the toilet. Launder or discard contaminated clothing. Provide readily accessible eye wash stations and safety showers.

9. Physical and Chemical Properties

Appearance	: Liquid. Yellow.
Odor	: Ammoniacal.
Odor threshold	: No data available.
pH	: No data available.
Melting point/range	: No data available.
Boiling point/range	: 298 °F (148 °C)
Flash point	: 261 °F (127 °C) closed cup
Evaporation rate	: No data available.
Flammability (solid, gas)	: Not applicable.
Upper/lower explosion/flammability limit	: Not applicable
Vapor pressure	: 0.80 mmHg
Water solubility	: No data available.
Relative vapor density	: Not applicable.
Relative density	: 0.95
Partition coefficient (noctanol/water)	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Viscosity	: 56 mPa.s at 77 °F (25 °C)

Molecular Weight : No data available.

10. Stability and Reactivity

Chemical Stability : Stable under normal conditions.

Conditions to avoid : No data available.

Materials to avoid : Reactive metals (e.g. sodium, calcium, zinc etc.).
Materials reactive with hydroxyl compounds.
Organic acids (i.e. acetic acid, citric acid etc.).
Mineral acids.
Sodium hypochlorite.
Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
Oxidizing agents.

Hazardous decomposition Products : Nitric acid
Ammonia
Nitrogen oxides (NO_x).
Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Carbon monoxide.
Carbon dioxide (CO₂).
Aldehydes
Flammable hydrocarbon fragments.

Possibility of hazardous Reactions/Reactivity : No data available.

11. Toxicological Information

11.1 Information on toxicological effects

Likely routes of exposure

Effects on Eye : Causes eye burns. May cause blindness.

Effects on Skin : Toxic in contact with skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Causes skin burns.

Inhalation Effects : Can cause severe eye, skin and respiratory tract burns. Inhalation of aerosol may cause irritation to the upper respiratory tract.

Ingestion Effects : Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Symptoms : No data available.

Acute toxicity

Acute Oral Toxicity	: No data is available on the product itself.	
Acute Oral Toxicity - Components		
Nonyl Phenol	LD50 : 580 mg/kg	Species : Rat.
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.- (2-aminomethylethoxy)- Aliphatic Amines	LD50 : 2,880 mg/kg LD50 : 1,200 mg/kg	Species : Rat. Species : Rat.
Inhalation	: No data is available on the product itself.	
Acute Dermal Toxicity	: LD50 : 1,000 mg/kg	Species : Rabbit.
Skin corrosion/irritation	: No data available.	
Serious eye damage/eye Irritation	: No data available	
Sensitization.	: May cause sensitization by skin contact.	

Chronic toxicity or effects from long term exposures

Carcinogenicity	: No data available.	
Reproductive toxicity	: No data is available on the product itself.	
Germ cell mutagenicity	: No data is available on the product itself.	
Specific target organ systemic toxicity (single exposure)	: No data available.	
Specific target organ systemic toxicity (repeated exposure)	: No data available.	
Aspiration hazard	: No data available.	

Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure

This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1percent or greater. May cause allergic skin reaction., This product may cause adverse reproductive effects. Eye disease., Skin disorders and Allergies.

12. Ecological Information**Ecotoxicity effects**

Aquatic toxicity	: No data is available on the product itself.	
Toxicity to fish - Components		
Nonyl Phenol	LC50 (96 h): 0.128 mg/l	Species: Fathead minnow (Pimephales promelas).
Toxicity to daphnia - Components		
Nonyl Phenol	EC50 (48 h): 0.0848 mg/l	Species: Daphnia
Nonyl Phenol	EC50 (48 h): 0.19 mg/l	Species: Daphnia
Toxicity to other organisms	: No data available.	

Persistence and degradability

Biodegradability	: No data is available on the product itself.
Mobility	: No data available.
Bioaccumulation	: No data is available on the product itself.
Bioaccumulation - Components	
Nonyl Phenol	Moderate bioaccumulation potential.

13. Disposal Considerations

Waste from residues / unused Products	
	: The product should not be allowed to enter drains, water courses or the soil; dispose of this material and its container in a safe way. The product should not be allowed to enter drains, water courses or the soil; dispose of this material and its container in a safe way. Contact supplier if guidance is required.
Contaminated packaging	: Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. Transport Information

DOT

UN/ID No.	: UN2927
Proper shipping name	: Toxic liquids, corrosive, organic, n.o.s., (Aliphatic Amines, Poly [oxy (methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy))
Class or Division	: 6.1
Packing group	: II
Label(s)	: 6.1 (8)
Marine Pollutant	: Yes

** NOTE: This product contains a substance that is regulated as a Marine Pollutant when transported in bulk packages (liquid – volume exceeding 450 liters, gas – water capacity exceeding 454 kilograms).

IATA

UN/ID No.	: UN2927
Proper shipping name	: Toxic liquid, corrosive, organic, n.o.s., (Aliphatic Amines, Poly [oxy (methyl-1,2 ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy))
Class or Division	: 6.1
Packing group	: II
Label(s)	: 6.1 (8)
Marine Pollutant	: Yes

** NOTE: This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment.

IMDG

UN/ID No.	: UN2927
Proper shipping name	: TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S., (Aliphatic Amines, Poly [oxy (methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2- aminomethylethoxy))
Class or Division	: 6.1
Packing group	: II
Label(s)	: 6.1 (8)
Marine Pollutant	: Yes

** NOTE: This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment.

TDG

UN/ID No.	: UN2927
Proper shipping name	: TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S., (Aliphatic Amines, Poly [oxy (methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2- aminomethylethoxy))
Class or Division	: 6.1
Packing group	: II
Label(s)	: 6.1 (8)
Marine Pollutant	: Yes

** NOTE: This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment.

Further Information

The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact a Master Terrazzo Technologies' service representative.

15. Regulatory Information

Toxic Substance Control Act (TSCA) 12(b) Component(s):

None.

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 Classification
Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level
None.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

16. Other Information

HMIS Rating
Health : 3*
Flammability : 1
Physical hazard : 0

REVISION NOTES : 14. TRANSPORT INFORMATION
SECTION 2: Hazards identification

Prepared by : Master Terrazzo Technologies
Telephone : 1-215-949-1474
Preparation Date : 04/07/2015