Safety Data Sheet
Morricite Hardener 23-2137 Part B

Version 1.0
Date: 05/27/2015

1. Product and Company Identification

Product Name	: Morricite Hardener 23-2137 Part B
Material Number	: 23-2137 Part B
Product Use 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. Hazards Identification

GHS classification

Acute toxicity - Dermal Category 3
Skin corrosion - Category 1B
Skin sensitization - Category 1

GHS label elements

Hazard pictograms/symbols

Signal Word: Danger

Hazard Statements:

H311:Toxic in contact with skin.
H314:Causes severe skin burns and eye damage.
H317:May cause an allergic skin reaction.

Precautionary Statements:

Prevention : P261:Avoid breathing dust/fume/gas/mist/vapors/spray.
P264:Wash hands thoroughly after handling.
P272:Contaminated work clothing should not be allowed out of the workplace.
P280:Wear protective gloves/protective clothing/eye protection/face protection.

Response : 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.
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

Toxic in contact with skin.
Corrosive
Severe respiratory irritant.
Severe skin irritant.
Severe eye irritant.
May cause sensitization by skin contact.

3. Composition/ Information on Ingredients

3.1 Substances

N/A

3.2 Substance/ Mixtures

Components	CAS No
Aminoethyl Piperazine, 1-(2-,(AEP	140-31-8

CHEMICAL FAMILY: Aliphatic Amines. The remaining components are trade secrets.

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. Rinse immediately with plenty of water also under the eyelids for at least 20 minutes.

Skin contact : Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. 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. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Ingestion : Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation : 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. Move to fresh air.

Most important symptoms/effects – acuate and delayed : Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat. Eye disease. Skin disorders and Allergies. Asthma.

5. Fire-Fighting Measures

Suitable extinguishing 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. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

Special protective equipment fire-fighters : Avoid contact with the skin. A face shield should be worn. Use personal protective for equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Do not allow run-off from fire fighting to enter drains or water courses.

6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedure : 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. 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. Avoid breathing vapors and/or aerosols. Avoid contact with eyes. Use only in well-ventilated areas. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage

Store in steel containers preferably located outdoors, above ground, and surrounded 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/Precautions

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 : Wear appropriate respirator when ventilation is inadequate.

Hand protection : Neoprene gloves.
Butyl-rubber
Nitrile rubber.
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.
Chemical resistant goggles must be worn.

Skin and body protection : Impervious clothing.
Full rubber suit (rain gear).
Rubber or plastic boots.
Long sleeve shirts and trousers without cuffs.
Slicker Suit.

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 hands at the end of each workshift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

9. Physical and Chemical Properties

Appearance	: Liquid. Amber.
Odor	: Mild.
Odor threshold	: No data available.
pH	: 11-12
Melting point/range	: No data available.
Boiling point/range	: No data available.
Flash point	: > 200 °F (> 100°C) T.C.C.
Evaporation rate	: No data available.
Flammability (solid, gas)	: Not applicable.
Upper/lower explosion/flammability limit	: Not applicable.
Vapor pressure	: < 0.05 mmHg at 68 °F (20 °C)
Water solubility	: Negligible.
Relative density	: 0.98 (water = 1)
Partition coefficient (noctanol/ water)	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Viscosity	: No data available.
Density	: 0.98 g/cm3 at 70 °F (21 °C)

10. Stability and Reactivity

Chemical Stability	: Stable under normal conditions.
Conditions to avoid	: No data available.

Materials to avoid	: Sodium hypochlorite. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. 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 (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO2).
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. Severe eye irritation.
Effects on Skin	: Toxic in contact with skin. Causes skin burns.
Inhalation Effects	: Can cause severe eye, skin and respiratory tract burns. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.
Ingestion Effects	: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.
Symptoms	: Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat. Eye disease., Skin disorders and Allergies., Asthma.

Acute toxicity

Acute Oral Toxicity	: No data is available on the product itself.

Acute Oral Toxicity - Components

Aminoethyl) piperazine, 1-(2-, (AEP)	LD50 : 2,108 mg/kg	Species : Rat.

Inhalation	: No data is available on the product itself.
Acute Dermal Toxicity	: LD50 : > 880 mg/kg Species : Rabbit. Method : Estimated.
Skin corrosion/irritation	: Severe skin irritation.
Serious eye damage/eye	: Severe eye irritation.

Irritation

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 : The product or a component may be mutagenic, the data is inconclusive.

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 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage., Repeated or prolonged contact causes sensitization, asthma and eczemas. Eye disease., Skin disorders and Allergies., Asthma.

12. Ecological Information

Ecotoxicity effects

Aquatic toxicity : No data is available on the product itself.

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.

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.

14. Transport Information

DOT

UN/ID No.	: UN2815
Proper shipping name	: N-Aminoethylpiperazine
Class or Division	: 8
Packing group	: III
Label(s)	: 8
Marine Pollutant	: No

IATA

UN/ID No.	: UN2815
Proper shipping name	: N-Aminoethylpiperazine
Class or Division	: 8
Packing group	: III
Label(s)	: 8
Marine Pollutant	: No

IMDG

UN/ID No.	: UN2815
Proper shipping name	: N-AMINOETHYLPIPERAZINE
Class or Division	: 8
Packing group	: III
Label(s)	: 8
Marine Pollutant	: No

TDG

UN/ID No.	: UN2815
Proper shipping name	: N-AMINOETHYLPIPERAZINE
Class or Division	: 8
Packing group	: III
Label(s)	: 8
Marine Pollutant	: No

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` customer 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

NFPA Classification

Health : 3
Flammability : 1
Reactivity hazard : 0

Prepared by : Master Terrazzo Technologies
Telephone : 1-215-949-1474
Chemtel-800-255-3924
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