

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE
COMPANY/UNDERTAKING

1.1 Product identifier	M1 Heat Blocker is thermal insulation coating "MT-109-5
1.2 Relevant identified uses of the substance or mixture and uses advised against	"MT-109-5 is used as a thermal and anti-corrosion insulation for an outdoor and indoor enclosing structures, roofing, reservoirs, pipelines, air ducts, ventilation and air conditioning system made from metal, concrete, brick and other building materials at operating temperatures from -60°C to +260 °C.
1.3 Details of the supplier of the safety data sheet Company Name Company Address Contact Name Phone / Fax Part# MT-109-5	MASTERS TOUCH GLOBAL INC 20000 Plum Canyon Rd 1721 Santa Clarita, CA 91350 661-510-1830 moe@m1rust.com Moe Elkateb

SECTION 2: HAZARDS IDENTIFICATION
2.1 Classification of the substance or mixture:

This product is not classified as dangerous according to EU Directives 67/548 / EEC or 1999/45 / EC This product is not classified as dangerous according to Directive 1999/45 / ECC.

This product is not classified as hazardous according to Regulation (EC) № 1272/2008

2.2 Label elements

This product has no label elements.


2.3 Other hazards

May cause irritation to the eyes and/or respiratory system with prolonged contact

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: An aqueous solution

3.1 Substance

Not applicable

3.2 Mixture

Safe components according to European Regulation No. 1907/2006. VOC – 0 % g/ L

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information: Consult a doctor for specific advice.

Inhalation: Remove to fresh air. Perform artificial respiration if breathing has stopped

Skin contact: Wash thoroughly with soap and water. Dry area with clean towel. Remove contaminated clothing and wash clothing before re-use.

Eyes contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. **Ingestion:** Do not induce vomiting. Wash out mouth thoroughly with water and give 2 cups of water to drink. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Not classified. May produce an allergic reaction. Inhalation of vapors in high concentration may cause irritation of respiratory system. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

None flammable. Use an extinguishing agent suitable for surrounding fires such as water spray, alcohol resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards

None known

5.3. Advice for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.

For emergency responders

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust. Wear appropriate protective equipment (see Section 8). See

Sections 2 and 7 for additional information on hazards and precautionary measures.

6.2 Environmental precautions

Minimize spread. Keep out of drains, sewers, ditches and water ways. Notify authorities

6.3 Methods and materials for containment and cleaning up

In case the spillage or leakage is in small quantity, recover it into a sealable empty container after being absorbed to waste or the like and, then, dispose of it in accordance with the description in Section 13. In case the spillage or leakage is in large quantity, prevent it from outflowing by enclosing it with a bank or the like, recover it into a sealable empty container in a

safe place and dispose of it similarly. In addition, take care that the disposal shall not impact the environment, such as sewage outfalls, surface water, groundwater and rivers.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid all personal contact. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash thoroughly after handling. Avoid release to the environment.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well-ventilated place. Keep only in the original container. Do not use aluminum, tin or zinc containers. Store at ambient temperatures as indicated on labels

7.3. Specific end use(s)

Read and follow label instructions

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters Occupational exposure limit values:

Component name	CAS #	% Range
Acrylic base polymer	25067-01-0	13 % - 15%
SiO ₂	7631-86-9	12 % - 15 %
w210	66402-68-4	8 % - 20%
TiO ₂	13463-67-7	22 % - 25%
p glycol	57-55 -6	23 % - 25%

8.2. Exposure controls

Appropriate Engineering Measures

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommend exposure limits. If user operations generate vapors, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Eye and face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Hand protection: Protective gloves made of PVA or rubber are required. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing **Respiratory protection:** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapor/particulate (EN 14387). Type A/P1. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Physical State	Liquid
Color	White
Odor	No data available
pH	Not applicable
Melting point/Freezing point	No data available
Initial boiling point/boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability Limits	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative Density	No data available
Solubility(ies)	Practically insoluble
Partition coefficient Octanol/Water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity @20±2°C	No data available
Explosive properties	Not explosive
Oxidizing Properties	Not applicable
Possibility of hazardous reactions	Not applicable

9.2 Other information

Total Solids (Dry Matter Content)	49%
Drying time @20±2°C	30 minutes
Thermal conductivity	0,0012 W/(m•K)
Hardness Chart	0,3
Coating Resistance after 1,5h @200°C	Matte, without cracks, delamination's and bubbles
Covering ability (depends on method of application)	200 - 280 g/m ²
Elasticity in bending	1,4 mm
Resistance to temperature difference static effect from -40°C up to +60°C	Resistant
Resistance to liquid static effect @20±2°C	Minor color change is allowed
– sea salt (3% solution)	
– sodium chloride	
– distilled water	
– mineral oil	
– diesel fuel.	

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available

10.2. Chemical stability

Stable under recommended storage conditions **10.3. Possibility of**

hazardous reactions None under normal processing.

10.4 Conditions to avoid

Heat, sparks, ignition points, flames, static electricity.

10.5 Incompatible materials

Avoid strong acids and alkalis. Do not use aluminum, tin or zinc containers.

10.6 Hazardous Decomposition products

None under normal use

SECTION 11: TOXICOLOGICAL INFORMATION
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11.1 Information on toxicological effects Acute toxicity

Not classified. May produce an allergic reaction. Inhalation of vapors in high concentration may cause irritation of respiratory system. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Product/ingredient name	Test	Species	Dose
Sodium silicate	LD50	Rat	> 2.000 mg / kg
Polymers of 2-propenoic and 2-methylprop-2-enoic acids and their derivatives	DL50 Oral	Rat	> 5000 mg / kg
	DL50 Dermal	Rabbits	> 5000 mg / kg
Titanium dioxide	DL50 Oral	Rat	> 20000 mg / kg
	DL50 Dermal	Rabbit	> 10,000 mg / kg
	CL50 Inhalation	Rats	> 6820 mg / m ³
Calcium carbonate	CL50	–	Not applicable
	DL50 Oral	Rat	6850 mg / kg

Skin corrosion/irritation: Not expected to cause skin irritation or corrosion.

Serious eye damage/eye irritation: Not expected to cause irritation or irreversible damage to the eye.

Respiratory or skin sensitization: Not expected to cause respiratory or skin.

Germ cell mutagenicity: Not expected to cause germ cell mutagenicity.

Carcinogenicity: Not classifiable as to its carcinogenicity to humans

Reproductive toxicity: May cause harm to breast-fed children.

STOT - Single exposure: Inhalation of dust may irritate respiratory system

STOT - Repeat exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Not expected to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity:**

Not classified.

	Product/ingredient name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
	Titanium dioxide			CL0 fish> 1000 mg/l 720 h Phoxims	EC0> 10000 mg/l
	Calcium carbonate		CL50 3000-7000 mg / l 48 h Daphnia Magna		

12.2 Persistence and Degradability:

This product has not been tested for persistence or biodegradability.

12.3 Bio accumulative potential:

No data available.

12.4 Mobility in soil:

No data available.

12.5 Results of PBT and vPvB assessment:

Not required or conducted.

12.6 Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Waste from Residues / Unused Products: Chemical residues are generally classified as special waste and are covered by regulations which vary according to location. Contact your local waste disposal authority for advice or pass to a chemical disposal company.

Contaminated packaging

Contaminated packaging may contain traces of the product and therefore should be disposed of in the same way as product.

SECTION 14: TRANSPORT INFORMATION

ADR/RID Not regulated

IMDG/IMO Not regulated

ICAO/IATA Not regulated

ADN Not regulated

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of:

EU Commission Regulation (EU) 2015/830 (Reach)

EU Regulation (EC) No 1272/2008 (CLP)

BPR: Biocidal Products Regulation (EU) No 528/2012

DPD: Dangerous Preparations Directive 99/45/EC

DSD: Dangerous Substances Directive 67/548/EEC

Council Directive 98/24/EC

Council Directive 2013/29/EU

Council Directive 1999/13/EC

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: OTHER INFORMATION

Training advice: Before using/handling the product one must read carefully present SDS.

Abbreviations and acronyms:

CAS: Chemical Abstracts Service (division of the American Chemical Society)

EH40: The official name for the occupational exposure limits document for the EU

EC50: Half maximal effective concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

STOT SE: Specific target organ toxicity - single exposure

STOT RE: Specific target organ toxicity - repeated exposure

Document history

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Version no. 1

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet