

MET-MOUNT 4 HARDENER

Safety Data Sheet

Date of issue: 01/01/2023

SECTION 1: Identification

1.1. Identification

Trade name : MET-MOUNT 4 HARDENER
Product code : M338-H

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Epoxy resin: hardener

1.3. Supplier

METLAB CORPORATION
4011 HYDE PARK BLVD.
NIAGARA FALLS, NY 14305
800-828-6866

1.4. Emergency telephone number

Emergency number : 800-255-3924, +1 813.248.0585
ChemTel

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Acute toxicity (dermal) Category 4	H312	Harmful in contact with skin.
Skin corrosion/irritation Category 1B	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Hazardous to the aquatic environment - Acute Hazard Category 3	H402	Harmful to aquatic life

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H302+H312 - Harmful if swallowed or in contact with skin.
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H402 - Harmful to aquatic life

Precautionary statements (GHS-US) :

P260 - Do not breathe mist/vapors/spray.
P264 - Wash all contact areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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P304+P340 - If inhaled: Remove person to fresh air and keep 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 CENTER or doctor/physician.
P321 - Specific treatment: See SDS Section 4.
P322 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to special waste facility in accordance with regional/national regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Aromatic amine	(CAS-No.) TRADE SECRET	> 60	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:vapor), H331 Skin Corr. 1B, H314 Skin Sens. 1A, H317 Aquatic Acute 3, H402

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.
First-aid measures after skin contact	: Rinse skin with plenty of water or shower. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash contaminated clothing before reuse. Dispose of contaminated leather articles.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Cough. Irritation to throat and respiratory system. May cause an allergy or asthma symptoms or breathing difficulties if inhaled. Shortness of breath.
Symptoms/effects after skin contact	: severe skin irritation, redness, dermatitis. destruction of skin tissue. Caustic burns/corrosion of the skin.
Symptoms/effects after eye contact	: Product vapor from heated material can cause lacrimation, conjunctivitis, and corneal edema when absorbed into the tissue of the eye. Corneal edema may temporarily impact vision. . Causes severe inflammation of the conjunctiva and may cause severe damage of the cornea. Redness, pain. Causes serious eye damage.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Abdominal pain. Severe irritation or burns to the mouth, throat, esophagus, and stomach.
Chronic symptoms	: Symptoms of chronic overexposure may not be readily apparent.

Aromatic amine (TRADE SECRET)	
Chronic symptoms	Animal studies suggest chronic overexposure effects may target the liver. Cross-sensitization, or allergic response away from direct contact area may occur.

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Irritating and/or toxic gases or fumes likely if involved in fire or exposed to extreme heat.
Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Dike water and extinguishing agents away from drains and waterways if possible.
Protection during firefighting : Complete protective clothing. Use self-contained breathing apparatus and chemically protective clothing.
Other information : Burning produces stinking and toxic fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Protective goggles. Rubber apron, boots.
Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Soak up small spill with inert solids. Stop leak, if possible without risk.

6.1.2. For emergency responders

Protective equipment : Impermeable boots and protective equipment. complete protective suit against chemicals.
Emergency procedures : Stop release. Prevent product from entering drains. Dike and contain spill. Absorb remaining liquid with sand or inert absorbent and remove to safe place. Decontaminate the spill surface area using a neutralization solution (see list); scrubbing the surface with a broom or brush helps the decontamination solution to penetrate into porous surfaces. Wait at least 15 minutes after first application of the neutralization solution. Cover the area with absorbent material and shovel this into an approved metal container.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Soak up small spill with inert solids. Contain or absorb spilled liquid with clay or other absorbent material. Dike and contain spill. Sweep or shovel spills into appropriate container for disposal.
Methods for cleaning up : On land, sweep or shovel into suitable containers. Clean/flush spill area with mild detergent solution.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : When heated, material emits irritating fumes.
Precautions for safe handling : Avoid breathing mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Ensure good ventilation of the work station.
Hygiene measures : Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a dry place.
Incompatible materials : concentrated strong acids. Mineral acids.
Maximum storage period : 12 months
Storage temperature : > 10 °C
Storage area : Keep locked up. Store at ambient temperature. Keep container closed when not in use.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Aromatic amine (TRADE SECRET)

Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

butyl rubber. chloroprene rubber. nitrile rubber

Hand protection:

protective gloves

Eye protection:

Safety goggles, face shield

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear gas mask if conc. in air > exposure limit

Thermal hazard protection:

Use insulated gloves when handling this material hot.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Color	: Colorless
Odor	: Ammoniacal
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: 10 °C
Boiling point	: 247 °C
Flash point	: 112 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.52 mm Hg 21 °C
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.92 g/cm³
Solubility	: In water, material is completely soluble.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available

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Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

N-Nitrosamines, many 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. Reaction with epoxies in large amounts or under uncontrolled conditions may produce extreme heat with noxious smoke and fumes.

10.4. Conditions to avoid

Overheating.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products may be released during prolonged heating like smoke, carbon monoxide and dioxide, nitrogen oxides (NOx). Ammonia.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Oral: Harmful if swallowed.
Acute toxicity (dermal) : Dermal: Harmful in contact with skin. .
Acute toxicity (inhalation) : Inhalation:vapor: Not classified.

ATE US (oral)	1030 mg/kg body weight
ATE US (dermal)	1840 mg/kg body weight

Aromatic amine (TRADE SECRET)	
LD50 oral rat	1030 mg/kg OECD 401
LD50 dermal rat	> 2000 mg/kg OECD 402
LD50 dermal rabbit	1840 mg/kg
LC50 inhalation rat (mg/l)	> 5.01 mg/l/4h OECD 403
ATE US (oral)	1030 mg/kg body weight
ATE US (dermal)	1840 mg/kg body weight
ATE US (vapors)	3 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Symptoms/effects after inhalation : Cough. Irritation to throat and respiratory system. May cause an allergy or asthma symptoms or breathing difficulties if inhaled. Shortness of breath.
Symptoms/effects after skin contact : severe skin irritation, redness, dermatitis. destruction of skin tissue. Caustic burns/corrosion of the skin.

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Symptoms/effects after eye contact	: Product vapor from heated material can cause lacrimation, conjunctivitis, and corneal edema when absorbed into the tissue of the eye. Corneal edema may temporarily impact vision. Causes severe inflammation of the conjunctiva and may cause severe damage of the cornea. Redness, pain. Causes serious eye damage.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Abdominal pain. Severe irritation or burns to the mouth, throat, esophagus, and stomach.
Chronic symptoms	: Symptoms of chronic overexposure may not be readily apparent.

Aromatic amine (TRADE SECRET)	
Chronic symptoms	Animal studies suggest chronic overexposure effects may target the liver. Cross-sensitization, or allergic response away from direct contact area may occur.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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Aromatic amine (TRADE SECRET)	
LC50 fish 1	110 mg/l 96 Hr, Semi-static, Leuciscus Idus
EC50 Daphnia 1	23 mg/l 48 hr OECD 202
EC50 other aquatic organisms 1	37 mg/l 72 hr, Desmodesmus subspicatus (green algae), static test

12.2. Persistence and degradability

Aromatic amine (TRADE SECRET)	
Persistence and degradability	Not readily biodegradable in water.
BOD (% of ThOD)	8 % ThOD Not readily biodegradable

12.3. Bioaccumulative potential

EFI HT Epoxy Activator 50125 (None - mix)	
Bioaccumulative potential	Low bioaccumulation potential.
Aromatic amine (TRADE SECRET)	
Log Pow	0.99 23 C (OECD Test Guideline107)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of contents or partial containers in accordance with local/regional regulations. Direct disposal of free liquid without treatment to landfill IS NOT recommended.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description	: UN2735 Polyamines, liquid, corrosive, n.o.s. (Isophoronediamine), 8, III
UN-No.(DOT)	: UN2735
Proper Shipping Name (DOT)	: Polyamines, liquid, corrosive, n.o.s. Isophoronediamine
Class (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT)	: III - Minor Danger

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Hazard labels (DOT) : 8 - Corrosive



DOT Symbols : G - Identifies PSN requiring a technical name
Emergency Response Guide (ERG) Number : 153
Other information : No supplementary information available.

Transport by sea

Transport document description (IMDG) : UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S., 8, III
UN-No. (IMDG) : 2735
Proper Shipping Name (IMDG) : POLYAMINES, LIQUID, CORROSIVE, N.O.S.
Isophoronediamine
Class (IMDG) : 8 - Corrosive substances
Packing group (IMDG) : III - substances presenting low danger
Limited quantities (IMDG) : 1 L

Air transport

Transport document description (IATA) : UN 2735 Polyamines, liquid, corrosive, n.o.s., 8, III
UN-No. (IATA) : 2735
Proper Shipping Name (IATA) : Polyamines, liquid, corrosive, n.o.s.
Isophoronediamine
Class (IATA) : 8 - Corrosives
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

EFI HT Epoxy Activator 50125 (None - mix)	
SARA Section 311/312 Hazard Classes	Health hazard - Respiratory or skin sensitization Health hazard - Serious eye damage or eye irritation Health hazard - Skin corrosion or Irritation

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Aromatic amine (TRADE SECRET)	
SARA Section 311/312 Hazard Classes	Health hazard - Respiratory or skin sensitization Health hazard - Skin corrosion or Irritation

15.2. International regulations

CANADA

No additional information available

EU-Regulations

EFI HT Epoxy Activator 50125 (None - mix)	
RoHS Substance	No
SVHC	No

Aromatic amine (TRADE SECRET)	
SVHC	No
RoHS Substance	No

National regulations

No additional information available

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SECTION 16: Other information

Revision date : 01/01/2019

Other information : **DISCLAIMER:** To the best of our knowledge, the information contained in this SDS is accurate or is obtained from sources believed to be accurate. However, no liability, expressed or implied, is assumed for the accuracy or completeness of the information contained herein. Buyer assumes liability in its use of the material.

Full text of H-phrases:

H302	Harmful if swallowed
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled.
H402	Harmful to aquatic life

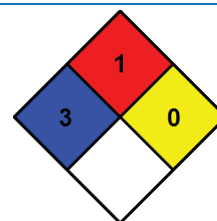
Abbreviations and acronyms:

	N.A. - Not Applicable N.E. - Not Established N.D. - Not Determined ACGIH = American Conference of Governmental Industrial Hygienists OSHA = US Occupational Health and Safety Administration TLV-TWA = Threshold Limit Value-Time Weighted Average (8 hrs) STEL = Short-Term Exposure Limit (15 min) C = Ceiling Value PEL = Permissible Exposure Limit OEL = Occupational Exposure Limit IDLH = Immediately Dangerous to Life and Health ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor PNEC = Predicted No Effect Concentration LOAEL = Lowest Observed Adverse Effect Level NOAEL = No Observed Adverse Effect Level NOAEC = No Observed Adverse Effect Concentration
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NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
* - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : D
D - Face shield and eye protection, Gloves, Synthetic apron

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