

# Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Printing Date: 1/26/2015

Revision: 10/06/2015

**Trade Name: MERCAP 445™ Part B**

## 1 Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade Name: MERCAP 445™ Part B

### 1.2 Article No.: MERCAP 445™ Part B

### 1.3 Details of the supplier of the Safety Data Sheet Manufacturer/Supplier:

Elite Crete Systems  
1061 Transport Drive,  
Valparaiso, IN 46383  
Toll Free: 888.323.4445  
Tel: (219) 465-7671  
Fax: (219) 531-0898  
[www.elitecrete.com](http://www.elitecrete.com)

### 1.4 Emergency telephone number:

CHEMTREC US DOMESTIC: (800-424-9300)  
CHEMTREC INTERNATIONAL: (703-527-3887)  
CANUTEC, CA DOMESTIC: (613-996-6666)

## 2 Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 and GHS:

Reproductive Toxicity Category 2  
Acute Inhalation Toxicity Category 4  
Acute Oral Toxicity Category 4  
Skin Sensitization Category 1  
Skin Corrosion/Irritation Category 2  
Acute Aquatic Toxicity Category 1  
Chronic Aquatic Toxicity Category 2

#### Classification according to Directive 1999/45/EC:



C; Corrosive.

R34: Causes burns.



Xn; Harmful.

R22: harmful if swallowed.



Xi; Sensitizing.

R43: May cause sensitization by skin contact.



N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

#### Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

#### Classification System:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

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### 2.2 Label elements

**Labeling according to Regulation (EC) No 1272/2008:**

Product has been labeled according to the CLP regulation.

**Hazard pictograms:**



GHS05



GHS07



GHS09

**Signal Word:** Danger

**Hazard-determining components of labeling:** Contains M-phenylenebis(methylamine), , polymer with 1,3-benzenedimethanamine, 4-(1m10dimethylethyl)phenol, nonyl phenol and C,C,C-trimethyl-1,6-hexanediamine, trimethylhexane-1-6,diamine, benzyl alcohol.

**Hazard statements:**

- H302 +H332: harmful if swallowed or if inhaled.
- H314: Causes severe skin burns and eye damage.
- H317: May cause an allergic skin reaction.
- H401: Very toxic to aquatic life with long lasting effects.

Contains: Formaldehyde, polymer with 1,3-benzenedimethanamine, 4-(1m10dimethylethylethy)phenol, nonyl phenol, and C,C,C-trimethyl-1,6-hexanediamine, trimethylhexane-1,6-diamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine. May produce and allergic reaction.

**Precautionary statements**

- P101: If medical advice is needed, have product container or label at hand.
- P102: Keep out of reach of children.
- P103: Read label before use.
- P260: Do not breath dust/fume/gas/mist/vapors/spray
- 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
- P271: Use only in well ventilated area.
- P272: Contaminated work clothing should not be allowed out of the work place.
- P273: Avoid release to the Environment
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water /shower.
- 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 on label).
- P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P363: Wash contaminated clothing before reuse.
- P333+P313: If skin irritation or rash occurs. Get medical advice/attention.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
- P370+P378: In case of fire: Use for extinction: CO2, powder or water spray.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P391: Collect spillage.
- P405+P403+P235: Store locked up. Store in a well-ventilated place. Keep cool.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

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### Hazard description:

#### Canadian WHMIS Classification:

D2B - Toxic material causing other toxic effects.

E - Corrosive material

### WHMIS-symbols:



### NFPA ratings (scale 0 - 4)



Health = 3  
Fire = 1  
Reactivity = 0

### HMIS-ratings (scale 0 - 4)

#### HMIS Long term health hazard Substances

None of the ingredients is listed

Health	3
Fire	1
Reactivity	0

Health = 3  
Fire = 1  
Reactivity = 0

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

PBT: Not Applicable.

vPvB: Not Applicable.

## 3 Composition/information on ingredients

### 3.2 Mixture.

**Description:** Mixture of substances listed below with nonhazardous additives.

#### Hazardous components:

Identification #	Description	WT. %
CAS: 98-54-4 EINECS: 202-679-0	<b>Paratertiarybutyphenol</b> HAZARD CLASSIFICATION: [C] Corrosive. [N] Dangerous to the Environment RISK PHRASES: R34, R51/53	35 – 50%
CAS: 1477-55-0 EINECS: 216-032-5	<b>Benzene-1,3-dimethanamine</b> HAZARD CLASSIFICATION: [C] Corrosive RISK PHRASES: R34	20 – 30%
CAS: 25620-58-0 EINECS: 247-134-8	<b>Trimethylhexamethylenediamine</b> HAZARD CLASSIFICATION: [Xn] Harmful RISK PHRASES: R37, R43	25 – 45%

**Additional information:** Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

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## 4 First aid measures

### 4.1 Description of first aid measures

#### After inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

#### After skin contact:

Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

#### After eye contact:

If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation develops.

#### After swallowing:

If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

### 4.2 Most important symptoms and effects, both acute and delayed.

**Acute:** This material is harmful if inhaled and may cause delayed lung injury. This material may cause irritation to the respiratory tract and skin and even burns. Product may cause an allergic skin reaction.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis.

#### Target Organs:

**Acute:** Eye, Respiratory System, Skin

**Chronic:** Skin

**Hazards:** Pre-existing skin or respiratory system problems may be aggravated by exposure to this product.

### 4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptoms and reduce over-exposure.

## 5 Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

### 5.2 Special hazards arising from the substance or mixture:

Formation of toxic gasses is possible during heating or in case of fire.

In case of fire the following can be released:

Nitrogen oxides (NO<sub>x</sub>)

Carbon Monoxide (CO)

Under certain fire conditions, traces of other toxic gasses cannot be excluded.

### 5.3 Advice for firefighters:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

#### Additional Information:

Cool endangered receptacles/containers with water spray

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### 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** Personnel should be trained for spill response operations. Use self contained respiratory device. Wear Fully protective suit. Ensure adequate ventilation.
- 6.2 Environmental precautions:** All work practices must be aimed at eliminating environmental contamination. Inform respective authorities in case of seepage into water course or sewerage system. Do not allow to enter sewers, surface or ground water.
- 6.3 Methods and material for containment and cleaning up:** Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with a non-combustible absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).
- Additional Information:**  
Cool endangered receptacles/containers with water spray

### 7 Handling and storage

- 7.1 Precautions for safe handling**  
As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.
- 7.2 Conditions for safe storage, including any incompatibilities**  
**Storage:**  
**Requirements to be met by storerooms and receptacles:**  
Store in a cool location. Avoid contact with skin and eyes. Do not store near acids or oxidizing agents. Store away from all food stuffs..
- 7.3 Specific end use(s):** No information

### 8 Exposure controls/personal protection

**Additional information about design of technical facilities:**

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

**8.1 Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

1477-55-0	Benzene-1,3-dimethanamine
REL (USA)	Short-term valueL C 0,1 mg/m <sup>3</sup>
Skin	
TLV (USA)	Short-term valueL C 0,1 mg/m <sup>3</sup>
Skin	
EL (Canada)	Short-term valueL C 0,1 mg/m <sup>3</sup>
Skin	

**8.2 Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**

*The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.*

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**Respiratory protection:** Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

**Protection of hands:** Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.



Protective gloves

**Material of gloves:**

The selection of suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

**Eye protection:** Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.



Safety goggles

**Body Protection:**

Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

**Appearance:**

**Form:**

Liquid

**Color:**

Water – white – pale straw colored liquid

**Odor:**

Mild epoxy odor

**Odor threshold:**

Not Available

**pH-value:**

Not Available

**Change in condition**

**Melting point/Melting range:**

No data available

**Boiling point/Boiling range:**

>200°C

**Flash point:**

>392°F (>200°C)

**Flammability (solid, gaseous):**

No data available

**Auto/Self-ignition temperature:**

Not established

**Decomposition temperature:**

No data available

**Self-igniting:**

No data available

**Danger of explosion:**

This product is a flammable liquid above flash point shown above.

**Explosion limits**

**Lower:**

Not established

**Upper:**

Not established

**Vapor pressure at 20 °C:**

<0.1 mmHg @ 25°C

**Density at 20°C:**

No data available

**Relative density:**

8.3 pounds per gallon @ 25°C

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<b>Vapor density:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Solubility in / Miscibility with Water:</b>	Not Available
<b>Specific Gravity 20oC: (Water = 1):</b>	Not Available
<b>Viscosity:</b>	
<b>Dynamic:</b>	No data available
<b>Kinematic:</b>	No data available
<b>Solvent content:</b>	
<b>Organic solvents:</b>	No data available
<b>VOC (EC)</b>	No data available
<b>9.2 Other information</b>	No data available

## 10 Stability and reactivity

### 10.1 Reactivity

### 10.2 Chemical stability: Product is stable

**Thermal decomposition / conditions to be avoided:** When heated to decomposition this product produces noxious gases such as CO, CO<sub>2</sub>, NO<sub>x</sub>, amines, ammonia and others.

### 10.3 Possibility of hazardous reactions: No data available

### 10.4 Conditions to avoid: Contact with incompatible materials

### 10.5 Incompatible materials: Oxidizing agents and amines should be avoided as these will cause exothermic polymerization. Avoid extreme heat

### 10.6 Hazardous decomposition products: Will not occur

## 11 Toxicological information

### 11.1 Information on toxicological effects: Toxicity data is available for this product

#### Acute toxicity:

#### LD/LC0 values relevant for classification

1477-55-0	Benzene-1,3-dimethanamine
Oral	LD50 1040mg/kg (rat)
Inhalative	LC50/4h 2,4 mg/l (rat)

25620-58-0	Trimethylhexamethylenediamine
Oral	LD50 900 mg/kg (rat)

**Primary irritant effect:** Contact with this product can be irritating to exposed skin, eyes with strong caustic effect, and respiratory system and mucous membranes.

**Sensitization:** This product is considered a skin sensitizer. And possible by prolonger exposure.

#### Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU classification Guidelines for preparations as issued in the latest version.

Harmful  
Corrosive  
Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of the esophagus and stomach.

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**Reproductive toxicity information:** No information concerning the effects of this product and its components on the human reproduction system.

## 12 Ecological information

### 12.1 Toxicity

**Aquatic toxicity:** This material is harmful to the environment

**12.2 Persistence and degradability:** No data available

**12.3 Bioaccumulative potential:** No data available

**12.4 Mobility in soil:** No evidence is currently available on this product's effects on plants or animals.

#### Ecotoxicological effects:

**Remark:** Very toxic for fish

#### Additional ecological information:

Water hazard class 2 (German regulation) (Self -assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewerage system.

Must not reach sewerage water or drainage ditch undiluted or un-neutralized.

Danger to drinking water, even if small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Vary toxic for aquatic organisms.

### 12.5 results of PBT and vPvB assessment

**PBT:** Not applicable

**vPvB:** Not Applicable

### 12.6 other adverse effects:

No further relevant information available.

## 13 Disposal considerations

### 13.1 Waste treatment methods

#### Recommendations:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

**RCRA WASTE CODE:** D002

**EU WASTE CODE:** To Be Established

## 14 Transport information

### 14.1 UN-Number

**DOT, ADR, IMDG, IATA: TGD:** UN2735

### 14.2 UN proper shipping name

**DOT, IATA:** Corrosive Liquid, basic, organic N.O.S. (MPhenylenebis (Methylamine) Trimethylhexamethylenediamines)

**IMDG:** Corrosive Liquid, basic, organic N.O.S. (MPhenylenebis (Methylamine) Trimethylhexamethylenediamines) Marine Pollutant

**ADR:** Un 2735 Corrosive Liquid, basic, organic N.O.S. (MPhenylenebis (Methylamine) Trimethylhexamethylenediamines) Environmentally Hazardous



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### 14.3 Transport hazard class(es)

DOT: CAN:: IMDG:

Class: 8 Corrosive substances

Label:



ADR:

Class: 8 (C7) Corrosive substances

Label:



IATA

Class: 8 Corrosive substances

Label:



### 14.4 Packing group

DOT, ADR, IMDG, IATA: TGD: II

### 14.5 Environmental hazards:

Marine pollutant: Yes



### 14.6 Special precautions for user

Warning corrosive substances

Danger code (Kemler): 80

EMS Number: F-A, S-B

Segregation groups: Alkalis

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

No data available

### Transport/Additional information

#### ADR

Limited quantities (LQ) 5L

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000 ml

Transport category: 3

Tunnel restriction code: E

#### ADR

Tunnel restriction code e

### UN "Model Regulation":

**3267 Corrosive Liquid, basic, organic N.O.S. (MPhenylenebis (Methylamine) Trimethylhexamethylenediamines) Environmentally Hazardous. 8, II**

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### 15 Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. United States (USA)

**SARA:** This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.: None

**Section 355 (extremely hazardous substances):** None of the ingredients are listed.

**Section 313 (Toxic Release Inventory):** None of the ingredients are listed.

**TSCA (Toxic Substances Control Act):** All ingredients are listed.

#### Proposition 65 (California):

##### Chemicals known to cause cancer:

CAS: 1477-55-0 Benzene-1,3-dimethanamine

#### Canada

##### Canadian Domestic Substances List (DSL):

All ingredients are listed

##### Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredients listed

##### Canadian Ingredient Disclosure list (limit 1%):

CAS: 1477-55-0 Benzene-1,3-dimethanamine

CAS: 25620-58-0 Trimethylhexamethylenediamine

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Hazard statements:

H302 +H332: harmful if swallowed or if inhaled.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H401: Very toxic to aquatic life with long lasting effects.

Contains: 1,3-benzenedimethanamine, 4-(1m10dimethylethylethyl)phenol, nonyl phenol, and C,C,C-trimethyl-1,6-hexanediamine, trimethylhexane-1,6-diamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine. May produce and allergic reaction.

#### Precautionary statements

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P260: Do not breath dust/fume/gas/mist/vapors/spray

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

P271: Use only in well ventilated area.

P272: Contaminated work clothing should not be allowed out of the work place.

P273: Avoid release to the Environment

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P280: Wear protective gloves/protective clothing/eye protection/face protection  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water /shower.  
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 on label).  
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
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P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
P391: Collect spillage.  
P405+P403+P235: Store locked up. Store in a well-ventilated place. Keep cool.  
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation.  
IATA: International Air Transport Association.  
ACGIH: American Conference of Governmental Industrial Hygienists.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
ELINCS: European List of Notified Chemical Substances.  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
NFPA: National Fire Protection Association (USA).  
HMIS: Hazardous Materials Identification System (USA).  
LC50: Lethal concentration, 50 percent.  
LD50: Lethal dose, 50 percent.