



1 Identification

- **Product identifier**
- **Trade name:** MLH14, MLH16 Metallock Hardener
- **Article number:** MLH14, MLH16
- **Application of the substance / the mixture** Coating
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SEM Products Inc.
1685 Overview Drive
Rock Hill, SC 29730
803 207 8225
- **Information department:**
cust_care@semproducts.com : SEM Products, Inc. 1685 Overview Dr. Rock Hill, SC 29730 : phone 1-800-831-1122, M - TH 7am - 4pm EDT
- **Emergency telephone number:** CHEMTREC 1-800-424-9300

2 Hazard identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 3

H226

Flammable liquid and vapour.



GHS05 Corrosion

Serious Eye Damage - Category 1

H318

Causes serious eye damage.



GHS07

Skin Irritation - Category 2

H315

Causes skin irritation.

Specific Target Organ Toxicity - Single Exposure - Category 3

H335-H336

May cause respiratory irritation. May cause drowsiness or dizziness.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS05



GHS07

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
butan-1-ol
4-chloro-alpha,alpha,alpha-trifluorotoluene
2,4,6-tris(dimethylaminomethyl)phenol

(Contd. on page 2)



Trade name: MLH14, MLH16 Metallock Hardener

(Contd. of page 1)

Amine proprietary

· **Hazard statements**

- H226 *Flammable liquid and vapour.*
- H315 *Causes skin irritation.*
- H318 *Causes serious eye damage.*
- H335-H336 *May cause respiratory irritation. May cause drowsiness or dizziness.*

· **Precautionary statements**

- P210 *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
- P240 *Ground and bond container and receiving equipment.*
- P241 *Use explosion-proof [electrical/ventilating/lighting] equipment.*
- P242 *Use non-sparking tools.*
- P243 *Take actions to prevent static discharges.*
- P261 *Avoid breathing dust/fume/gas/mist/vapours/spray.*
- P264 *Wash thoroughly after handling.*
- P271 *Use only outdoors or in a well-ventilated area.*
- P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
- P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*
- 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/doctor.*
- P321 *Specific treatment (see on this label).*
- P332+P313 *If skin irritation occurs: Get medical advice/attention.*
- P362+P364 *Take off contaminated clothing and wash it before reuse.*
- P370+P378 *In case of fire: Use for extinction: CO2, powder or water spray.*
- P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*
- P403+P235 *Store in a well-ventilated place. Keep cool.*
- P405 *Store locked up.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:**

*Mixture: consisting of the following components.
Weight percentages*

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: **MLH14, MLH16 Metallock Hardener**

(Contd. of page 2)

· Dangerous components:		
1330-20-7	xylene	15-40% w/w
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	10-30% w/w
71-36-3	butan-1-ol	10-30% w/w
	Amine proprietary	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	1-5% w/w

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

CA
(Contd. on page 4)



Trade name: MLH14, MLH16 Metallock Hardener

(Contd. of page 3)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

1330-20-7 xylene

EL	Short-term value: 150 ppm Long-term value: 100 ppm
EV	Short-term value: 650 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm

71-36-3 butan-1-ol

EL	Long-term value: 15 ppm Ceiling limit value: 30 ppm
EV	Long-term value: 20 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 5)



Trade name: MLH14, MLH16 Metallock Hardener

(Contd. of page 4)

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>66 °C

· **Flash point:** 30 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 340 °C

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.

· **Explosion limits:**

Lower:	1.1 Vol %
Upper:	9.4 Vol %

· **Vapor pressure at 20 °C:** 6.7 hPa

Density at 20 °C:	0.97169 g/cm ³
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

(Contd. on page 6)



Trade name: MLH14, MLH16 Metallock Hardener

(Contd. of page 5)

- | | |
|----------------------------|--|
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 80.1 % |
| VOC content: | 55.4 % |
| | 655.7 g/l / 5.47 lb/gl |
| · Solids content: | |
| | 19.9 % |
| · Other information | |
| | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

71-36-3 butan-1-ol

Oral	LD50	790 mg/kg (rat)
Dermal	LD50	3400 mg/kg (rabbit)
Inhalative	LC50/4 h	8000 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

1330-20-7	xylene	3
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(Contd. on page 7)

CA

Safety Data Sheet

according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: MLH14, MLH16 Metallock Hardener

(Contd. of page 6)

· **NTP (National Toxicology Program)**

None of the ingredients is listed.


12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Must not reach bodies of water or drainage ditch undiluted or unneutralized.
 Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|------------------------------------|
| · UN-Number | UN1263 |
| · DOT, TDG, IMDG, IATA | |
| · UN proper shipping name | Paint |
| · DOT | 1263 Paint, special provision 640E |
| · TDG | PAINT |
| · IMDG, IATA | |
| · Transport hazard class(es) | |
| · DOT | |
|  | |
| · Class | 3 Flammable liquids |

(Contd. on page 8)

CA

Safety Data Sheet

according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: MLH14, MLH16 Metallock Hardener

(Contd. of page 7)

- **Label** 3
- **TDG, IMDG, IATA**



- **Class** 3 Flammable liquids
- **Label** 3

- **Packing group**
- **DOT, TDG, IMDG, IATA** III

- **Environmental hazards:**
- **Marine pollutant:** No

- **Special precautions for user** Warning: Flammable liquids
- **EMS Number:** F-E, S-E
- **Stowage Category** A

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**

- **DOT**
- **Quantity limitations** On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

- **TDG**
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- **IMDG**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- **UN "Model Regulation":** UN 1263 PAINT, SPECIAL PROVISION 640E, 3, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

1330-20-7 xylene

71-36-3 butan-1-ol

- **TSCA (Toxic Substances Control Act):**

1330-20-7 xylene

(Contd. on page 9)

CA

Safety Data Sheet

according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: **MLH14, MLH16 Metallock Hardener**

(Contd. of page 8)

98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene
71-36-3	butan-1-ol
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

1330-20-7	xylene
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene
71-36-3	butan-1-ol
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

71-36-3	butan-1-ol
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· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS05 GHS07

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

butan-1-ol

4-chloro-alpha,alpha,alpha-trifluorotoluene

2,4,6-tris(dimethylaminomethyl)phenol

Amine proprietary

· **Hazard statements**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P242 Use non-sparking tools.

P243 Take actions to prevent static discharges.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

(Contd. on page 10)

CA



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: MLH14, MLH16 Metallock Hardener

(Contd. of page 9)

P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use for extinction: CO ₂ , powder or water spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **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.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Steve Gaver (sgaver@semproducts.com)
- **Date of preparation / last revision** 06/20/2017 / 6
- **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- *** Data compared to the previous version altered.**

CA