Reviewed on 01/31/2008

Printing date 01/31/2008

## 1 Identification of substance

· Product details

· Trade name: METALOCK DTM EPOXY PRIMER

· Article number: ML011, ML014

· Manufacturer/Supplier: SEM Products Inc. 651 Michael Wylie Dr. Charlotte, NC 28217 (704)522-1006

· Information department:

labsupport@sem.ws: SEM Products 651 Michael Wylie Dr. Charlotte, NC 28217: phone 1-704-522-1006, M -

TH 7am - 4pm EDT

· Emergency information: 24 HR EMERGENCY CHEMTREC 1-800-424-9300

## 2 Composition/Data on components

· Chemical characterization

· Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous	components:	
14807-96-6	Talc (Mg3H2(SiO3)4)	10-25%
	Warning: 💠 3.2/2, 3.3/2A, 3.8/3	
471-34-1	calcium carbonate	10-25%
	Warning: 💠 3.2/2, 3.3/2A, 3.8/3	
67-64-1	acetone	10-25%
	Danger: 🚸 2.6/2	
	Warning: 🕠 3.3/2A, 3.8/3	
25036-25-3	EPOXY RESIN	10-25%
	Warning: 💠 3.2/2, 3.3/2A, 3.8/3	
1330-20-7	xylene	2.5-10%
	Danger: 🥎 3.1.D/3, 3.1.I/4, 3.2/2	
	<i>Warning:</i> <b>(0)</b> 2.6/3	
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	2.5-10%
	Warning: 🚸 2.6/3; 🕠 3.2/2, 3.3/2A, 3.8/3	
13983-17-0	WOLLASTONITE	2.5-10%
	Warning: 🕠 3.2/2, 3.3/2A, 3.8/3	
7779-90-0	trizinc bis(orthophosphate)	2.5-10%
	Warning: 📀 4.1.C/1; 🔨 3.2/2, 3.3/2A, 3.8/3	
	EPOXY RESIN	1-2.5%
	Warning: 🕦 3.2/2, 3.3/2A, 3.8/3	
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	≤1%
	Danger:   3.1.0/2, 3.1.D/3, 3.1.I/3, 3.2/2, 3.3/2A, 3.8/3	

(Contd. on page 2)

SEM

Printing date 01/31/2008

Reviewed on 01/31/2008

Trade name: METALOCK DTM EPOXY PRIMER

(Contd. of page 1)

### 3 Hazards identification

#### · Hazard description:







Irritant Highly flammable Dangerous for the environment

#### · Information pertaining to particular dangers for man and environment:

The product has to be labelled due to the calculation procedure of international guidelines.

Has a narcotizing effect.

Highly flammable.

Irritating to eyes, respiratory system and skin.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Vapours may cause drowsiness and dizziness.

#### · Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· NFPA ratings (scale 0 - 4)



Health = 3 Fire = 3Reactivity = 0

#### · HMIS-ratings (scale 0 - 4)



Health = 3Fire = 3

REACTIVITY 0 Reactivity = 0

## · GHS label elements



#### Danger

2.6/2 - Highly flammable liquid and vapour.



#### Warning

3.2/2 - Causes skin irritation.

3.3/2A - Causes serious eye irritation.

3.8/3 - May cause respiratory irritation. May cause drowsiness or dizziness.

#### Warning

3.1/5 - May be harmful in contact with skin.



4.1/2 - Toxic to aquatic life with long lasting effects.

#### · Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

*Ground/bond container and receiving equipment.* 

*Use explosion-proof electrical/ventilating/lighting/ equipment.* 

(Contd. on page 3)

SEM

Printing date 01/31/2008 Reviewed on 01/31/2008

Trade name: METALOCK DTM EPOXY PRIMER

(Contd. of page 2)

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

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

· Response:

IF ON SKIN: Wash with plenty of soap and water.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment (see label).

If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

*In case of fire: Use for extinction: CO2, powder or water spray.* 

Collect spillage.

· Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

· Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

## 4 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. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

## 5 Fire fighting measures

- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Protective equipment: No special measures required.

### 6 Accidental release measures

- · Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- · Measures for environmental protection:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

· Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

(Contd. on page 4)

Printing date 01/31/2008

Reviewed on 01/31/2008

Trade name: METALOCK DTM EPOXY PRIMER

(Contd. of page 3)

Do not flush with water or aqueous cleansing agents

## 7 Handling and storage

- · Handling:
- · Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

## 8 Exposure controls and personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Components with limit values that require monitoring at the w
---

#### 471-34-1 calcium carbonate

PEL	$15*5**mg/m^3$
	*total dust **respirable fraction
REL	$10*5**m9/m^3$

\*total dust \*\*respirable fraction

TLV TLV withdrawn

#### 67-64-1 acetone

	2400 mg/m³, 1000 ppm
REL	590 mg/m³, 250 ppm

TLV Short-term value: 1782 mg/m<sup>3</sup>, 750 ppm Long-term value: 1188 mg/m³, 500 ppm BEI

#### 1330-20-7 xylene

PEL 435 mg/m<sup>3</sup>, 100 ppm

REL Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm TLV Short-term value: 651 mg/m<sup>3</sup>, 150 ppm Long-term value: 434 mg/m<sup>3</sup>, 100 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · 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 eyes and skin.

(Contd. on page 5)

SEM

Printing date 01/31/2008

Reviewed on 01/31/2008

#### Trade name: METALOCK DTM EPOXY PRIMER

(Contd. of page 4)

#### · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

*Use suitable respiratory protective device in case of insufficient ventilation.* 

· Protection of hands:



Protective gloves

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

#### · 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

General Information	
Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	55°C (131°F)
· Flash point:	-17°C (1°F)
· Ignition temperature:	465°C (869°F)
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.
· Explosion limits:	
Lower:	2.6 Vol %
Upper:	13.0 Vol %
· Vapor pressure at 20°C (68°F)	: 233 hPa (175 mm Hg)
Density at 20°C (68°F):	1.5 g/cm <sup>3</sup>

(Contd. on page 6)

Printing date 01/31/2008

Reviewed on 01/31/2008

Trade name: METALOCK DTM EPOXY PRIMER

	(Contd. of page
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Solvent content:	
Organic solvents:	32.2 %
VOC content:	8.8 %
	135.4 g/l / 1.13 lb/gl
· Solids content:	67.6 %

## 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Dangerous reactions No dangerous reactions known.
- · Dangerous products of decomposition: No dangerous decomposition products known.

## 11 Toxicological information

· Acute toxicity:

· LD/LC5	0 valu	es that are relevant for classification:
1330-20	-7 xyle	ne
Oral	LD50	4300 mg/kg (rat)
Dermal	<i>LD50</i>	2000 mg/kg (rabbit)
7779-90	-0 trizi	nc bis(orthophosphate)
Oral	<i>LD50</i>	>5000 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

## 12 Ecological information

- · Ecotoxical effects:
- · Remark: Toxic for fish
- · General notes:

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

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

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

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

SEM

Printing date 01/31/2008

Reviewed on 01/31/2008

Trade name: METALOCK DTM EPOXY PRIMER

(Contd. of page 6)

## 13 Disposal considerations

- · Product:
- · 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

· DOT regulations:



· Hazard class:

· Identification number: UN1263 · Packing group: II · Proper shipping name (technical name): PAINT · Label 3

· Land transport TDG (Canada) and ADR/RID (Europe):



· Hazard class: 3 Flammable liquids

· UN-Number: 1263 · Packaging group: II · Label: 3

• **Description of goods:** 1263 PAINT, special provision 640D

· Maritime transport IMDG:



IMDG Class: 3
UN Number: 1263
Label 3
Packaging group: II
EMS Number: F-E,S-E
Marine pollutant: No
Propper shipping name: PAINT

(Contd. on page 8)

Reviewed on 01/31/2008

Printing date 01/31/2008

Trade name: METALOCK DTM EPOXY PRIMER

(Contd. of page 7)

## · Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 3 · UN/ID Number: 1263 · Label 3 · Packaging group: II· Propper shipping name: PAINT

- · UN ''Model Regulation'': UN1263; PAINT; 3; II
- · Environmental hazards: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID

Sara	
	(extremely hazardous substances):
	ingredient is listed.
	(Specific toxic chemical listings):
	Talc (Mg3H2(SiO3)4)
1330-20-7	
	ethylbenzene
108-88-3	
67-56-1	methanol
	COBALT CARBOXYLATE
TSCA (Tox	ic Substances Control Act):
14807-96-6	<i>Talc</i> ( <i>Mg3H2</i> ( <i>SiO3</i> )4)
471-34-1	calcium carbonate
67-64-1	acetone
1330-20-7	xylene
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene
13463-67-7	titanium dioxide
7779-90-0	trizinc bis(orthophosphate)
7631-86-9	silicon dioxide, chemically prepared
21645-51-2	aluminium hydroxide
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane
100-41-4	ethylbenzene
108-88-3	toluene
1333-86-4	Carbon black
<i>(5.5.7.1)</i>	methanol

SEM

Printing date 01/31/2008

Reviewed on 01/31/2008

Trade name: METALOCK DTM EPOXY PRIMER

Proposition 65	(Contd. of p	age
· Chemicals known to cause cancer:		
25036-25-3 EPOXY RESIN		
1330-20-7 xylene		
100-41-4 ethylbenzene		
1333-86-4 Carbon black		
· Chemicals known to cause reproductive toxicity for female	·ç•	
None of the ingredients is listed.	J.	
· Chemicals known to cause reproductive toxicity for males.		
None of the ingredients is listed.		
Chemicals known to cause developmental toxicity:  108-88-3 toluene		
· Cancerogenity categories · EPA (Environmental Protection Agency)		
67-64-1 acetone		
1330-20-7 xylene		- 1
100-41-4 ethylbenzene		- 1
108-88-3 toluene		- 1
· IARC (International Agency for Research on Cancer)	2	
14807-96-6 Talc (Mg3H2(SiO3)4)	3	
1330-20-7 xylene	3	
13983-17-0 WOLLASTONITE	3	
13463-67-7 titanium dioxide  BENTONITE	3	50
	suspected carcinogen <2% 14808-0	)U-
7631-86-9 silicon dioxide, chemically prepared	3	
100-41-4 ethylbenzene	28	
108-88-3 toluene	3	
1333-86-4 Carbon black	2B	
· NTP (National Toxicology Program)		
None of the ingredients is listed.		
· TLV (Threshold Limit Value established by ACGIH)		
14807-96-6 Talc (Mg3H2(SiO3)4)		A
67-64-1 acetone		A
1330-20-7 xylene		A
13463-67-7 titanium dioxide		A
108-88-3 toluene		Α
1333-86-4 Carbon black		A
· NIOSH-Ca (National Institute for Occupational Safety an	d Health)	
13463-67-7 titanium dioxide		
1333-86-4 Carbon black		
· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

SEM

Printing date 01/31/2008

Reviewed on 01/31/2008

#### Trade name: METALOCK DTM EPOXY PRIMER

(Contd. of page 9)

#### · Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

#### · Hazard symbols:

*Irritant* 

Highly flammable

Dangerous for the environment

#### · Risk phrases:

Highly flammable.

Irritating to eyes, respiratory system and skin.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Vapours may cause drowsiness and dizziness.

## · Safety phrases:

Keep container in a well-ventilated place.

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

Use only in well-ventilated areas.

Use appropriate container to avoid environmental contamination.

## 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 MSDS: Environment protection department.
- · Contact: Steve Gaver
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Reglement internationale concernent le transport des merchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

 ${\it HMIS: Hazardous\ Materials\ Identification\ System\ (USA)}$ 

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

USA