Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/30/2013 Reviewed on 01/29/2013

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

· **Product identifier**

· **Trade name: ML011, ML014 Metalock DTM Epoxy Primer**

· **Article number:** ML011, ML014
· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the preparation** 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:** 24 HR EMERGENCY CHEMTREC 1-800-424-9300

2 Hazards identification

· **Classification of the substance or mixture**

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

· **Label elements**
· **GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).
· **Hazard pictograms** GHS02, GHS07, GHS08
· **Signal word** Danger
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
· **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.

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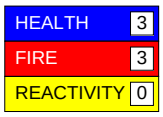
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 3
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 3
Fire = 3
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**		
14807-96-6	Talc Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	13 - 30%
471-34-1	calcium carbonate Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	13 - 30%
67-64-1	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	13 - 30%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene Flam. Liq. 3, H226; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	13 - 30%
25036-25-3	EPOXY RESIN Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	10 -13%
13983-17-0	WOLLASTONITE Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	5 - 7%
7779-90-0	trizinc bis(orthophosphate)	1.5 - 5%
1330-20-7	xylene Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	1.5 - 5%
	EPOXY RESIN Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	1-1.5%

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2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane Acute Tox. 2, H300; Acute Tox. 3, H311; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	≤1%

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. If symptoms persist, 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, sand, extinguishing powder. Do not use water.
· **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:**
Inform respective authorities in case of seepage into water course or sewage system.
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).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
· **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.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.

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Prevent formation of aerosols.
· **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:** *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.
· **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:**	
471-34-1 calcium carbonate	
PEL ()	15* 5** mg/m³ *total dust **respirable fraction
REL ()	10* 5** mg/m³ *total dust **respirable fraction
TLV ()	TLV withdrawn
67-64-1 acetone	
PEL ()	2400 mg/m³, 1000 ppm
REL ()	590 mg/m³, 250 ppm
TLV ()	Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm Long-term value: (1188) NIC-475 mg/m³, (500) NIC-200 ppm BEI
1330-20-7 xylene	
PEL ()	435 mg/m³, 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/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm BEI

· **Ingredients with biological limit values:**	
67-64-1 acetone	
BEI ()	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)

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1330-20-7 xylene	
BEI ()	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

· **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 eyes and skin.
· **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.
· **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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

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

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· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	55 °C
· **Flash point:**	-18 °C
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	465 °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:	2.6 Vol %
Upper:	13.0 Vol %
· **Vapor pressure at 20 °C:**	233 hPa
· **Density at 20 °C:**	1.5 g/cm³
· **Relative density**	Not determined.
· **Vapour 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.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	32.4 %
VOC content:	34.4 g/l / 0.29 lb/gl
Solids content:	67.6 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **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.

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11 Toxicological information

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

· **LD/LC50 values that are relevant for classification:**		
7779-90-0 trizinc bis(orthophosphate)		
Oral	LD50	>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

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
14807-96-6	Talc	2B
13983-17-0	WOLLASTONITE	3
13463-67-7	titanium dioxide	2B
1330-20-7	xylene	3
	BENTONITE	suspected carcinogen <2% 14808-60-7
7631-86-9	silicon dioxide, chemically prepared	3
100-41-4	ethylbenzene	2B
108-88-3	toluene	3
1333-86-4	Carbon black	2B

· **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.
· **Ecotoxical effects:**
· **Remark:** Toxic for fish
· **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.
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

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· **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**	
· **DOT, ADR, IMDG, IATA**	UN1263
· **UN proper shipping name**	
· **DOT, IATA**	PAINT
· **ADR**	1263 PAINT, ENVIRONMENTALLY HAZARDOUS, special provision 640D
· **IMDG**	PAINT, MARINE POLLUTANT

· **Transport hazard class(es)**

· **DOT**

· **Class**	3 Flammable liquids.
· **Label**	3

· **ADR, IMDG**

· **Class**	3 Flammable liquids
· **Label**	3

· **IATA**

· **Class**	3 Flammable liquids.
· **Label**	3

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· **Packing group**	
· **DOT, ADR, IMDG, IATA**	II
· **Environmental hazards:**	Product contains environmentally hazardous substances: trizinc bis(orthophosphate)
· **Marine pollutant:**	Yes
	Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)
· **Special precautions for user**	Warning: Flammable liquids
· **EMS Number:**	F-E,S-E
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	Product contains environmentally substance, liquid
· **UN "Model Regulation":**	UN1263, PAINT, special provision 640D, ENVIRONMENTALLY HAZARDOUS, 3, II

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):**

14807-96-6	Talc
1330-20-7	xylene
100-41-4	ethylbenzene
108-88-3	toluene
67-56-1	methanol
	COBALT CARBOXYLATE

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

14807-96-6	Talc
471-34-1	calcium carbonate
67-64-1	acetone
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene
25036-25-3	EPOXY RESIN
13463-67-7	titanium dioxide
7779-90-0	trizinc bis(orthophosphate)
1330-20-7	xylene
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

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108-88-3	toluene
1333-86-4	Carbon black
68911-87-5	ALKYL QUATERNARY AMMONIUM MONTMORILLONITE

· **Proposition 65**

· **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 females:**	
108-88-3	toluene

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**	
108-88-3	toluene
149-57-5	2-ethylhexanoic acid

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**		
67-64-1	acetone	I
1330-20-7	xylene	I
100-41-4	ethylbenzene	D
108-88-3	toluene	II

· **TLV (Threshold Limit Value established by ACGIH)**		
14807-96-6	Talc	A4
67-64-1	acetone	A4
13463-67-7	titanium dioxide	A4
1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3
108-88-3	toluene	A4
1333-86-4	Carbon black	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
13463-67-7 titanium dioxide
1333-86-4 Carbon black
67-56-1 methanol

· **OSHA-Ca (Occupational Safety & Health Administration)**
68911-87-5 ALKYL QUATERNARY AMMONIUM MONTMORILLONITE

· **GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).
· **Hazard pictograms** GHS02, GHS07, GHS08
· **Signal word** Danger
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

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H361 Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
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.
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 MSDS:** Environment protection department.
· **Contact:** Steve Gaver
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (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
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