SEM

Printing date 06/02/2005

Reviewed on 06/23/2004

1 Identification of substance

· Product details

· Trade name: 39337 Non-Sag SMC Structural Adhesive

· Article number: 39337 · Manufacturer/Supplier: SEM Products, Inc. 651 Michael Wylie Dr. Charlotte, NC 28217 USA

(704)522-1006

· Information department: 24HR EMERGENCY CHEMTREC 800-424-9300

2 Composition/Data on components

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

· Dangerous	components:	
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	25-50%
14807-96-6	Talc (Mg3H2(SiO3)4)	10-25%
66402-68-4	CERAMIC MICROSPHERES	10-25%
108-95-2	phenol	2.5-10%
	AMINE	2.5-10%
100-51-6	benzyl alcohol	2.5-10%
67762-90-7	FUMED SILICA	2.5-10%
84852-15-3	4-nonylphenol, branched	≤ 2.5%
111-40-0	2,2'-iminodiethylamine	≤ 2.5%
17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	≤ 2.5%
25338-55-0	(DIMETHYLAMINO)METHYLPHENOL	≤ 2.5%
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	≤ 2.5%

3 Hazards identification

· Hazard description:





Toxic

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.

Toxic in contact with skin and if swallowed.

Causes burns.

May cause sensitisation by skin contact.

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

Contains epoxy constituents. See information supplied by the manufacturer.

· Classification system:

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

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Material Safety Data Sheet acc. to ISO/DIS 11014

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· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



4 First aid measures

· General information:

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

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:

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

5 Fire fighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 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:

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

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).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

- · Handling:
- · Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

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- · Information about protection against explosions and fires: No special measures required.
- · 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.

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 workplace:

108-95-2 phenol

PEL 19 mg/m³, 5 ppm

Skin

REL Short-term value: C 60* mg/m³, C 15.6* ppm

Long-term value: 19 mg/m³, 5 ppm

*15-min

TLV 19 mg/m³, 5 ppm

Skin; BEI

67762-90-7 FUMED SILICA

TLV Short-term value: 10 mg/m³

111-40-0 2,2'-iminodiethylamine

REL 4 mg/m^3 , 1 ppm

Skin

TLV 4.2 mg/m³, 1 ppm

Skin

- · 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.

Store protective clothing separately.

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.

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· 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:	Fluid	
Color:	According to product specification	
Odor:	Characteristic	
· Change in condition		
Melting point/Melting ran	ge: Undetermined.	
Boiling point/Boiling rang	ge: 181°C (358°F)	
· Flash point:	99°C (210°F)	
· Ignition temperature:	595.0°C (1103°F)	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
Density at 20°C (68°F):	$1.39 \ g/cm^3$	
· Solubility in / Miscibility wit Water:	th Not miscible or difficult to mix.	
· Solvent content:		
Organic solvents:	0.1 %	
VOC content:	0.1 %	
	$1.6 \ g/l \ / \ 0.01 \ lb/gl$	
· Solids content:	99.9 %	

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 value	es that are relevant for classification:
108-95-2	2 phen	ol
Oral	LD50	317 mg/kg (rat)
Dermal	LD50	850 mg/kg (rabbit)

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- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

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

Corrosive

Irritant

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

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.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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

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:

· Packing group: III

Label ADHESIVES NON HAZARDOUS

· Land transport ADR/RID (cross-border):



· ADR/RID class: 8 Corrosive substances

· Danger code (Kemler): 86 · UN-Number: 2922

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· Packaging group: III · Label: 8+6.1

• Description of goods: 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (4-nonylphenol, branched, PHENOL)

· Maritime transport IMDG:



· IMDG Class: 8
· UN Number: 2922
· Label 8+6.1
· Packaging group: III
· EMS Number: F-A,S-B
· Marine pollutant: No

· Propper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (4-nonylphenol, branched, PHENOL)

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 8
 · UN/ID Number: 2922
 · Label 8+6.1
 · Packaging group: III

84852-15-3 4-nonylphenol, branched

· Propper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (4-nonylphenol, branched, PHENOL)

15 Regulations

· Sara	
· Section 355	(extremely hazardous substances):
108-95-2 pl	henol
107-15-3 et	hylenediamine
· Section 313	(Specific toxic chemical listings):
14807-96-6	Talc (Mg3H2(SiO3)4)
108-95-2	phenol
68909-14-8	ELASTOMER MODIFIED DIGLYCIDAL ETHER
25338-55-0	(DIMETHYLAMINO)METHYLPHENOL
107-21-1	ethanediol
67-56-1	methanol
· TSCA (Toxi	c Substances Control Act):
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
14807-96-6	Talc (Mg3H2(SiO3)4)
108-95-2	phenol
100-51-6	benzyl alcohol

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	2,2'-iminodiethylamine	
	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	
	3,6-diazaoctanethylenediamin	
	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	
	3-aminopropyltriethoxysilane	
	N-(3-(trimethoxysilyl)propyl)ethylenediamine	
	ethanediol	
	Carbon black	
	methanol	
	ethylenediamine	
· Proposition		
	nown to cause cancer:	
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular 700)	weight
1333-86-4	Carbon black	
· Chemicals I	nown to cause reproductive toxicity:	
None of the	ingredients is listed.	
	ity categories	
	onmental Protection Agency)	
108-95-2 p		
107-15-3 ei	hylenediamine	
· IARC (Inter	rnational Agency for Research on Cancer)	
14807-96-6	Talc (Mg3H2(SiO3)4)	Ĵ
108-95-2	phenol	Ĵ
1333-86-4	Carbon black	2
· NTP (Natio	nal Toxicology Program)	
None of the	ingredients is listed.	
· TLV (Thres	hold Limit Value established by ACGIH)	
14807-96-6	Talc (Mg3H2(SiO3)4)	F
108-95-2	phenol	P.
107-21-1	ethanediol	F
1333-86-4	Carbon black	A
107-15-3	ethylenediamine	A
64-17-5	ethanol	A
· NIOSH-Ca	(National Institute for Occupational Safety and Health)	
1333-86-4	Carbon black	
	Occupational Safety & Health Administration)	
· OSHA-Ca (Occupational Sujety & Heatin Administration)	

· Product related hazard informations:

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

· Hazard symbols:

Toxic

Dangerous for the environment

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· Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) 2,2'-iminodiethylamine

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane phenol

· Risk phrases:

Toxic in contact with skin and if swallowed.

Causes burns.

May cause sensitisation by skin contact.

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

· Safety phrases:

Keep locked up and out of the reach of children.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· Special labeling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

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: Mr. George Wallace

USA