

1 Identification

- **Product identifier**
- **Trade name:** 39767 Problem Plastic
- **Article number:** 39767
- **Application of the substance / the mixture** Adhesives
- **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(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Repr. 1 H360 May damage fertility or the unborn child.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger

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

bisphenolA(chloro)oxirane polymer

2,4,6-tris(dimethylaminomethyl)phenol

CERAMIC MICROSPHERES

dibutyl phthalate

BISPHENOL F EPOXY RESIN

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

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· **Hazard statements**

- H302 Harmful if swallowed.*
- H315 Causes skin irritation.*
- H319 Causes serious eye irritation.*
- H317 May cause an allergic skin reaction.*
- H360 May damage fertility or the unborn child.*
- H335 May cause respiratory irritation.*

· **Precautionary statements**

- P201 Obtain special instructions before use.*
- P202 Do not handle until all safety precautions have been read and understood.*
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray*
- P264 Wash thoroughly after handling.*
- P270 Do not eat, drink or smoke when using this product.*
- P271 Use only outdoors or in a well-ventilated area.*
- P272 Contaminated work clothing must not be allowed out of the workplace.*
- P280 Wear protective gloves/protective clothing/eye protection/face protection.*
- P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*
- P302+P352 IF ON SKIN: Wash with plenty of water.*
- 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.*
- P308+P313 IF exposed or concerned: Get medical advice/attention.*
- P321 Specific treatment (see on this label).*
- P330 Rinse mouth.*
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.*
- P337+P313 If eye irritation persists: Get medical advice/attention.*
- P362+P364 Take off contaminated clothing and wash it before reuse.*
- P363 Wash contaminated clothing before reuse.*
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.*
- 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	1	Health = 1
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:**

Mixture: consisting of the following components.

Weight percentages

· **Dangerous components:**

66402-68-4	CERAMIC MICROSPHERES	13 - 30%
	Mercaptan Terminated Polymer NJTS 800938 5952	13 - 30%
25068-38-6	bisphenolA(chloro)oxirane polymer	10 - 13%
28064-14-4	BISPHENOL F EPOXY RESIN	5 - 7%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	1.5 - 5%
68909-14-8	Modified diglycidal ether	1-1.5%
84-74-2	dibutyl phthalate	≤1%
17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	≤1%

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **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. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a 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 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **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** Not required.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

25068-38-6	bisphenolA(chloro)oxirane polymer	90 mg/m3
28064-14-4	BISPHENOL F EPOXY RESIN	30 mg/m3
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	6.5 mg/m3
13463-67-7	titanium dioxide	30 mg/m3
84-74-2	dibutyl phthalate	15 mg/m3
280-57-9	triethylenediamine	5.1 mg/m3
919-30-2	3-aminopropyltriethoxysilane	1.9 mg/m3
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	9.3 mg/m3
67762-90-7	FUMED SILICA	120 mg/m3
107-21-1	ethanediol	30 ppm
14808-60-7	Quartz (SiO2)	0.075 mg/m3
64-17-5	ethanol	1,800 ppm
67-56-1	methanol	530 ppm
21645-51-2	aluminium hydroxide	8.7 mg/m3
7631-86-9	silicon dioxide, chemically prepared	18 mg/m3

· **PAC-2:**

25068-38-6	bisphenolA(chloro)oxirane polymer	990 mg/m3
28064-14-4	BISPHENOL F EPOXY RESIN	330 mg/m3
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	72 mg/m3
13463-67-7	titanium dioxide	330 mg/m3
84-74-2	dibutyl phthalate	1,600 mg/m3
280-57-9	triethylenediamine	56 mg/m3
919-30-2	3-aminopropyltriethoxysilane	21 mg/m3
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	100 mg/m3
67762-90-7	FUMED SILICA	1,300 mg/m3
107-21-1	ethanediol	150 ppm
14808-60-7	Quartz (SiO2)	33 mg/m3
64-17-5	ethanol	3300* ppm
67-56-1	methanol	2,100 ppm
21645-51-2	aluminium hydroxide	73 mg/m3
7631-86-9	silicon dioxide, chemically prepared	740 mg/m3

· **PAC-3:**

25068-38-6	bisphenolA(chloro)oxirane polymer	5,900 mg/m3
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28064-14-4	BISPHENOL F EPOXY RESIN	2,000 mg/m ³
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	430 mg/m ³
13463-67-7	titanium dioxide	2,000 mg/m ³
84-74-2	dibutyl phthalate	9300* mg/m ³
280-57-9	triethylenediamine	340 mg/m ³
919-30-2	3-aminopropyltriethoxysilane	350 mg/m ³
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	230 mg/m ³
67762-90-7	FUMED SILICA	7,900 mg/m ³
107-21-1	ethanediol	900 ppm
14808-60-7	Quartz (SiO ₂)	200 mg/m ³
64-17-5	ethanol	15000* ppm
67-56-1	methanol	7200* ppm
21645-51-2	aluminium hydroxide	440 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **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:**
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

84-74-2 dibutyl phthalate

PEL	Long-term value: 5 mg/m ³
REL	Long-term value: 5 mg/m ³
TLV	Long-term value: 5 mg/m ³

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

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- **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:**
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.

- **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:	>260 °C
- **Flash point:** 218 °C
- **Flammability (solid, gaseous):** Not applicable.

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· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard. In use, may form flammable/explosive vapour-air mixture.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C:	1.61119 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.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
Water:	0.1 %
· Solids content:	98.9 %
· 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:**

84-74-2 dibutyl phthalate

Oral	LD50	8000 mg/kg (rat)
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Dermal LD50 20000 mg/kg (rabbit)

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

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

Harmful

Irritant

· **Carcinogenic categories**

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

13463-67-7	titanium dioxide	2B
14808-60-7	Quartz (SiO ₂)	1
64-17-5	ethanol	1
7631-86-9	silicon dioxide, chemically prepared	3

· **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO ₂)	K
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· **OSHA-Ca (Occupational Safety & Health Administration)**

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 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **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.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
· DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

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):	
68909-14-8	Modified diglycidal ether
84-74-2	dibutyl phthalate
107-21-1	ethanediol
67-56-1	methanol
· TSCA (Toxic Substances Control Act):	
66402-68-4	CERAMIC MICROSPHERES
1317-65-3	GROUND CALCIUM CARBONATE
25068-38-6	bisphenolA(chloro)oxirane polymer
28064-14-4	BISPHENOL F EPOXY RESIN
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol
13463-67-7	titanium dioxide
68909-14-8	Modified diglycidal ether
84-74-2	dibutyl phthalate

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17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane
280-57-9	triethylenediamine
919-30-2	3-aminopropyltriethoxysilane
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane
67762-90-7	FUMED SILICA
107-21-1	ethanediol
51274-00-1	YELLOW IRON OXIDE
14808-60-7	Quartz (SiO ₂)
64-17-5	ethanol
67-56-1	methanol
21645-51-2	aluminium hydroxide
7631-86-9	silicon dioxide, chemically prepared
7732-18-5	water

· **Proposition 65**

· **Chemicals known to cause cancer:**

25068-38-6	bisphenolA(chloro)oxirane polymer
28064-14-4	BISPHENOL F EPOXY RESIN
13463-67-7	titanium dioxide
107-21-1	ethanediol
14808-60-7	Quartz (SiO ₂)

· **Chemicals known to cause reproductive toxicity for females:**

84-74-2	dibutyl phthalate
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· **Chemicals known to cause reproductive toxicity for males:**

84-74-2	dibutyl phthalate
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· **Chemicals known to cause developmental toxicity:**

84-74-2	dibutyl phthalate
107-21-1	ethanediol
64-17-5	ethanol
67-56-1	methanol

· **Carcinogen categories**

· **EPA (Environmental Protection Agency)**

84-74-2	dibutyl phthalate	D
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· **TLV (Threshold Limit Value established by ACGIH)**

13463-67-7	titanium dioxide	A4
107-21-1	ethanediol	A4
14808-60-7	Quartz (SiO ₂)	A2
64-17-5	ethanol	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

13463-67-7	titanium dioxide
14808-60-7	Quartz (SiO ₂)
67-56-1	methanol

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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Trade name: 39767 Problem Plastic

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· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

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

bisphenolA(chloro)oxirane polymer
2,4,6-tris(dimethylaminomethyl)phenol
CERAMIC MICROSPHERES
dibutyl phthalate
BISPHENOL F EPOXY RESIN
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane

· **Hazard statements**

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H360 May damage fertility or the unborn child.
H335 May cause respiratory irritation.

· **Precautionary statements**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water.
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.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see on this label).
P330 Rinse mouth.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
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.

USA

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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** 06/28/2017 / 9

· **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 Organisation

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

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

Repr. 1: Reproductive toxicity – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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