

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/02/2015

Reviewed on 04/02/2015

1 Identification

- **Product identifier**
- **Trade name:** *HardBond Plastic Repair*
- **Article number:** *7746, 7747*
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** *Adhesives*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Tifco Industries, Inc.
PO Box 40277
Houston, TX 77240
800-868-4326
- **Emergency telephone number:** *Chem-Tel: 800-255-3924*

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.
Repr. 1B 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
CERAMIC MICROSPHERES
2,4,6-tris(dimethylaminomethyl)phenol

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titanium dioxide

· **Hazard statements**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H335 May cause respiratory irritation.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves.

P280 Wear eye protection / face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 = 1

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

HEALTH	1
FIRE	1
REACTIVITY	0

Health = 1

Fire = 1

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: consisting of the following components.

Weight percentages

· **Dangerous components:**

66402-68-4	CERAMIC MICROSPHERES	13 - 30%
1317-65-3	GROUND CALCIUM CARBONATE	13 - 30%
	Mercaptan Terminated Polymer	
25068-38-6	bisphenolA(chloro)oxirane polymer	10 -13%

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28064-14-4	BISPHENOL F EPOXY RESIN	5 - 7%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	1.5 - 5%
13463-67-7	titanium dioxide	1.5 - 5%
68909-14-8	Elastomer 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%
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	≤1%

4 First-aid measures

- **Description of first aid measures**

- **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:** 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 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.

- **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.

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:**

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.
- **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.
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:**
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.

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- **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
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	261 °C

- **Flash point:** 218 °C

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

- **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:	1.90049 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

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- | | |
|---|-----------------|
| · 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**
- **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)
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:
Irritant

- **Carcinogenic categories**

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

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

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

14 Transport information

- | | |
|---------------------------------------|-----------------|
| · UN-Number | Void |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | Void |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | Void |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Class | Void |
| · Packing group | Void |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |

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· **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

· **UN "Model Regulation":** -

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 Elastomer 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 Elastomer modified diglycidal ether

84-74-2 dibutyl phthalate

17557-23-2 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane

280-57-9 Triethylendiamin

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

· **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 (SiO₂)

· **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

· **Chemicals known to cause developmental toxicity:**

84-74-2 dibutyl phthalate

64-17-5 ethanol

67-56-1 methanol

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

84-74-2 dibutyl phthalate

D

· **TLV (Threshold Limit Value established by ACGIH)**

13463-67-7 titanium dioxide

A4

107-21-1 ethanediol

A4

14808-60-7 Quartz (SiO₂)

A2

64-17-5 ethanol

A3

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

13463-67-7 titanium dioxide

14808-60-7 Quartz (SiO₂)

67-56-1 methanol

· **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

CERAMIC MICROSPPHERES

2,4,6-tris(dimethylaminomethyl)phenol

titanium dioxide

· **Hazard statements**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H335 May cause respiratory irritation.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves.

P280 Wear eye protection / face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

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- P301+P312 *If swallowed: Call a poison center/doctor if you feel unwell.*
- P304+P340 *IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*
- 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** *04/02/2015 / 3*
- **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*
 - Acute Tox. 4: Acute toxicity, Hazard Category 4*
 - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*
 - Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A*
 - Skin Sens. 1: Sensitisation - Skin, Hazard Category 1*
 - Carc. 2: Carcinogenicity, Hazard Category 2*
 - Repr. 1B: Reproductive toxicity, Hazard Category 1B*
 - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3*
- *** Data compared to the previous version altered.**