

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2015

Reviewed on 07/24/2015

1 Identification

- **Product identifier**
- **Trade name:** TimberBond VFG - Part - A
- **Article number:** 87-140477A
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture**
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 GRA Services International
 5000 E 2nd Street
 Edmond, OK. 73034

- Emergency Telephone Number: 405-330-2395
- **Information department:** Environmental, Health, and Safety department.

2 Hazard(s) identification

- **Classification of the substance or mixture**
 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.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane
- **Hazard statements**
 Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
- **Precautionary statements**
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves.
 Wear eye protection / face protection.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment (see on this label).
 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2015

Reviewed on 07/24/2015

Trade name: TimberBond VFG - Part - A

(Contd. of page 1)

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



- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	1	Fire = 1
PHYSICAL HAZARD	0	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:**

25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	50-75%
17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	≤ 5%
1314-13-2	zinc oxide	≤ 2.5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

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:** If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Seek medical treatment.
- **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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2015

Reviewed on 07/24/2015

Trade name: TimberBond VFG - Part - A

(Contd. of page 2)

- **Advice for firefighters**

- **Protective equipment:**

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

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.

- **Methods and material for containment and cleaning up:**

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

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.

7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

- **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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **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.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2015

Reviewed on 07/24/2015

Trade name: TimberBond VFG - Part - A

(Contd. of page 3)

· **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.

· **Eye protection:** Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Colorless
Odor:	Characteristic
Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

· **Flash point:** 252 °C (486 °F)

· **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.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 1.19 g/cm³ (9.931 lbs/gal)

· **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.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2015

Reviewed on 07/24/2015

Trade name: TimberBond VFG - Part - A

(Contd. of page 4)

Kinematic:	Not determined.
Solvent content:	
Organic solvents:	0.0 %
Solids content:	100.0 %
Other information	No further relevant information available.
Volatile Organic Compounds:	Not determined

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:**

1314-13-2 zinc oxide

Oral LD50 7950 mg/kg (mouse)

- **Primary irritant effect:**
- **on the skin:** May cause skin irritation.
- **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)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **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.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2015

Reviewed on 07/24/2015

Trade name: TimberBond VFG - Part - A

(Contd. of page 5)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
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
- **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:**
It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.

14 Transport information

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN-Number · DOT · ADR, IMDG, IATA | <p style="margin: 0;"><i>Not Regulated</i></p> <p style="margin: 0;"><i>UN3082</i></p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR | <p style="margin: 0;"><i>Not Regulated</i></p> <p style="margin: 0;"><i>3082 Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))</i></p> |
| <ul style="list-style-type: none"> · IMDG | <p style="margin: 0;"><i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), zinc oxide), MARINE POLLUTANT</i></p> |
| <ul style="list-style-type: none"> · IATA | <p style="margin: 0;"><i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))</i></p> |

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2015

Reviewed on 07/24/2015

Trade name: TimberBond VFG - Part - A

(Contd. of page 6)

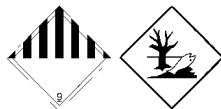
· **Transport hazard class(es)**

· DOT

· Class

Not Regulated

· **ADR, IMDG, IATA**



· Class

9 Miscellaneous dangerous substances and articles

· Label

9

· **Packing group**

· DOT

Not Regulated

· ADR, IMDG, IATA

III

· **Environmental hazards:**

Product contains environmentally hazardous substances: zinc oxide, reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

· **Marine pollutant:**

Yes

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

· **Danger code (Kemler):**

90

· **EMS Number:**

F-A,S-F

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· DOT

· Remarks:

Add "Marine Pollutant" to end of proper shipping name if shipping in a bulk container (>119 gallons).

· ADR

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

Same as listed for Standard Shipments above.

· U.S. Domestic Ground Shipments:

· U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:

Same as listed for Standard Shipments above.

· **Emergency Response Guide (ERG) Number:**

Not determine

· IMDG

· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

(Contd. on page 8)

Safety Data Sheet

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Printing date 07/24/2015

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Trade name: TimberBond VFG - Part - A

(Contd. of page 7)

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN "Model Regulation": | <p>UN3082, Environmentally hazardous substances, liquid, n.o.s.
(reaction product: bisphenol-A-(epichlorhydrin) epoxy resin
(number average molecular weight = 700)), 9, III</p> |
|--|--|

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):

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

1314-13-2	zinc oxide	≤2.5%
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· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to the State of California (Prop. 65) to cause cancer:

25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

1314-13-2	zinc oxide	D, I, II
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· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

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

None of the ingredients is listed.

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

· Hazard pictograms



GHS07

- Signal word Warning

(Contd. on page 9)

Safety Data Sheet

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(Contd. of page 8)

- **Hazard-determining components of labeling:**
*reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane*
- **Hazard statements**
*Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.*
- **Precautionary statements**
*Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves.
 Wear eye protection / face protection.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment (see on this label).
 Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **National regulations:**
- **Water hazard class:** *Water hazard class 2 (Self-assessment): hazardous for water.*
- **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:** *Environmental, Health & Safety Department*
- **Contact:** *Environmental, Health & Safety Manager*
- **Date of preparation / last revision** *07/24/2015 / 13*
- **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)
 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
 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*