Printing date 07/24/2015 Reviewed on 07/24/2015

1 Identification

- · Product identifier
- · Trade name: TimberBond NSG Part A
- · Article number: 87-140474A
- · 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



- · 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.

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Safety Data Sheet acc. to OSHA HCS

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· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



- · 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.

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- · 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.

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· 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

I nysicai ana chemicai propei	r nysicai ana chemicai 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/wa	ter): Not determined.					
· Viscosity:						
Dynamic:	Not determined.					

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	(Contd. of pa	age 4)
Kinematic:	Not determined.	
· Solvent content: Organic solvents:	0.0 %	
Solids content: Other information	100.0 % 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.
- $\cdot \textbf{\textit{Sensitization:}} \ Sensitization\ possible\ through\ skin\ contact.$
- · 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.

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- · 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 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				
· UN-Number				
$\cdot DOT$	Not Regulated			
· ADR, IMDG, IATA	UN3082			
· UN proper shipping name				
$\cdot DOT$	Not Regulated			
$\cdot ADR$	3082 Environmentally hazardous substances, liquid, n.o.s.			
	(reaction product: bisphenol-A-(epichlorhydrin) epoxy resin			
	(number average molecular weight = 700))			
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,			
	N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy			
	resin (number average molecular weight = 700), zinc oxide),			
	MARINE POLLUTANT			
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,			
	N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy			
	resin (number average molecular weight = 700))			

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Trade name: TimberBond NSG - Part - A

	(Contd. of page
Transport hazard class(es)	
DOT Class	Not Populated
	Not Regulated
ADR, IMDG, IATA	
Class Label	9 Miscellaneous dangerous substances and articles 9
Packing group	
DOT	Not Regulated III
ADR, IMDG, IATA	
Environmental hazards: Marine pollutant:	Product contains environmentally hazardous substances: zin oxide, reaction product: bisphenol-A-(epichlorhydrin) epox resin (number average molecular weight = 700) Yes
Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
Special marking (ADA):	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 and the IBC Code	/78 Not applicable.
Transport/Additional information:	
DOT Remarks:	Add "Marine Pollutant" to end of proper shipping name 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
U.S. Domestic Ground Shipments:	Same as listed for Standard Shipments above.
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 Codo El
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per inner packaging. 30 ml Maximum net quantity per outer packaging: 1000 ml
	(Contd. on page

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· UN "Model Regulation":

UN3082, Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)), 9, III

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%

· 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)

· 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

· 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



· Signal word Warning

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· 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 eve 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 / 12
- · 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