

**1 Identification**

- **Product identifier**
- **Trade name:** *Therobond 1500 PART A*
- **Article number:** Therobond 1500A
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Resin Designs, LLC  
11 State Street  
WOBURN, MA 01801  
USA  
epoznysz@resindesigns.com
- **Information department:** Product safety department
- **Emergency telephone number:** During normal opening times: +1 (781) 935-3133

**2 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS08 Health hazard

Muta. 2 H341 Suspected of causing genetic defects.  
Carc. 1A H350 May cause cancer.



GHS07

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.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Harmful

Limited evidence of a carcinogenic effect. Possible risk of irreversible effects.



Irritant

Irritating to eyes and skin. May cause sensitisation by skin contact.

- **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of international guidelines.

- **Classification system:**

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

- **Label elements**

- **Labelling according to EU guidelines:**

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

- **Code letter and hazard designation of product:**



Harmful

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· **Hazard-determining components of labeling:**Epoxy Resin - Proprietary  
butyl glycidyl ether· **Risk phrases:**Irritating to eyes and skin.  
Limited evidence of a carcinogenic effect.  
May cause sensitisation by skin contact.  
Possible risk of irreversible effects.· **Safety phrases:**Keep out of the reach of children.  
Wear suitable protective clothing, gloves and eye/face protection.  
If swallowed, seek medical advice immediately and show this container or label.  
Dispose of this material and its container to hazardous or special waste collection point.· **Special labeling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

· **Classification system:**· **NFPA ratings (scale 0 - 4)**Health = 1  
Fire = 1  
Reactivity = 0· **HMIS-ratings (scale 0 - 4)**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 of the substances listed below with nonhazardous additions.· **Dangerous components:**

	Epoxy Resin - Proprietary	25-50%
2426-08-6	butyl glycidyl ether	2.5-10%
1333-86-4	Carbon black	≤ 2.5%
14808-60-7	Quartz (SiO <sub>2</sub> )	≤ 2.5%

**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.

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- **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.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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.

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· **Control parameters**· **Components with limit values that require monitoring at the workplace:****2426-08-6 butyl glycidyl ether**

PEL	Long-term value: 270 mg/m <sup>3</sup> , 50 ppm
REL	Ceiling limit value: 30 mg/m <sup>3</sup> , 5.6 ppm *15-min
TLV	Long-term value: 16 mg/m <sup>3</sup> , 3 ppm Skin; DSEN

**1333-86-4 Carbon black**

PEL	Long-term value: 3.5 mg/m <sup>3</sup>
REL	Long-term value: 3.5* mg/m <sup>3</sup> *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m <sup>3</sup> *inhalable fraction

· **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.

· **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.

· **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

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**9 Physical and chemical properties**

## · Information on basic physical and chemical properties

## · General Information

## · Appearance:

Form: Fluid  
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 (502 °F)

· Flash point: 249 °C (480 °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): 1.6 g/cm<sup>3</sup> (13.352 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.

Kinematic: Not determined.

## · Solvent content:

Organic solvents: 0.1 %

VOC content: 0.1 %

1.6 g/l / 0.01 lb/gl

· 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.

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- **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:**

### 2426-08-6 butyl glycidyl ether

Oral	LD50	2050 mg/kg (rat)
Dermal	LD50	2520 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)**

1333-86-4	Carbon black	2B
14808-60-7	Quartz (SiO <sub>2</sub> )	1

- **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO <sub>2</sub> )	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 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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

US

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**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**

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· DOT, ADN, IATA</li> <li>· IMDG</li> </ul>	<p>not regulated UN3082</p>
<ul style="list-style-type: none"> <li>· UN proper shipping name</li> <li>· DOT, ADN, IATA</li> <li>· IMDG</li> </ul>	<p>not regulated ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT</p>
<ul style="list-style-type: none"> <li>· Transport hazard class(es)</li> <li>· DOT, ADN, IATA</li> <li>· Class</li> </ul>	<p>not regulated</p>
<ul style="list-style-type: none"> <li>· IMDG</li> </ul>	
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>9 Miscellaneous dangerous substances and articles 9</p>
<ul style="list-style-type: none"> <li>· Packing group</li> <li>· DOT, IATA</li> <li>· IMDG</li> </ul>	<p>not regulated III</p>
<ul style="list-style-type: none"> <li>· Environmental hazards:</li> <li>· Marine pollutant:</li> </ul>	<p>Product contains environmentally hazardous substances: BISPHENOL A EPOXY RESIN Yes Symbol (fish and tree)</p>
<ul style="list-style-type: none"> <li>· Special precautions for user</li> <li>· EMS Number:</li> </ul>	<p>Not applicable. F-A,S-F</p>
<ul style="list-style-type: none"> <li>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> </ul>	
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p>5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>

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· 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 ingredients is listed.

## · Section 313 (Specific toxic chemical listings):

71-36-3 butan-1-ol

## · TSCA (Toxic Substances Control Act):

All ingredients are listed.

## · Proposition 65

## · Chemicals known to cause cancer:

1333-86-4 Carbon black

14808-60-7 Quartz (SiO<sub>2</sub>)

## · 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.

## · Carcinogenic categories

## · EPA (Environmental Protection Agency)

71-36-3 butan-1-ol

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

1333-86-4 Carbon black

A4

14808-60-7 Quartz (SiO<sub>2</sub>)

A2

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

1333-86-4 Carbon black

14808-60-7 Quartz (SiO<sub>2</sub>)

## · Product related hazard informations:

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

## · Hazard symbols:



Harmful

## · Hazard-determining components of labeling:

Epoxy Resin - Proprietary  
butyl glycidyl ether

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· **Risk phrases:**

Irritating to eyes and skin.  
Limited evidence of a carcinogenic effect.  
May cause sensitisation by skin contact.  
Possible risk of irreversible effects.

· **Safety phrases:**

Keep out of the reach of children.  
Wear suitable protective clothing, gloves and eye/face protection.  
If swallowed, seek medical advice immediately and show this container or label.  
Dispose of this material and its container to hazardous or special waste collection point.

· **Special labeling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

· **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:** Mr. Edward Poznysz, VP of Technologies: epoznysz@resindesigns.com

· **Date of preparation / last revision** 06/09/2015 / -

· **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)

VOC: Volatile Organic Compounds (USA, EU)

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

Muta. 2: Germ cell mutagenicity, Hazard Category 2

Carc. 1A: Carcinogenicity, Hazard Category 1A