# SAFETY DATA SHEETS

## This SDS packet was issued with item:

076460315

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

076460307 076460349

## 1. Chemical Product and Contact Information

**Product Name:** **Bond-1® SF Solvent-Free SE Adhesive**

**Material Safety Sheet Number:** **00340**
Date of Issue: 12/01/08
Revision Date: 09/25/09

**Company Identification:**
**Pentron Clinical**
1717 West Collins Ave.
Orange, CA 92867
Phone: **800-551-0283**
203-265-7397

**Emergency Information Chemtrec:** **800-424-9300**
**Chemtrec International:** **202-483-7616**

## 2. Composition/Information on Ingredients

Chemical characteristics: Mixture of UDMA, TEGDMA, HEMA, & 4-MET resins, silane-treated bariumborosilicate glasses*, silica with initiators, stabilizers and UV absorber, organic and/or inorganic pigments, opacifiers.

*contains a small amount of aluminum oxide.

| Element | CAS # | Exposure Limit mg/m³ | |
|---|---|---|---|
| | | OSHA PEL | ACGIH TLV |
| UDMA | 74389-53-0 | N/E | N/E |
| TEGDMA | 109-10-6 | N/E | N/E |
| HEMA | 868-77-9 | N/E | N/E |
| 4-MET | N/A | N/E | N/E |
| Silane treated barium glass | N/E | N/E | N/E |
| Silica (amorphous) | 69012-64-2 | N/E | 2R |
| Minor additives | Various | N/A | N/A |
| Photo Curing System | Various | N/E | N/E |

## 3. Hazard Identification

Risk identification: None known.
Special risks for human beings and environment: None known.
Classification: Not hazardous. Those people known to be allergic to methacrylate resins should avoid the use of this product.

## 4. First Aid Measures

After skin contact: Wash with plenty of soap and water.
After eye contact: Rinse with plenty of water and contact an ophthalmologist.
After swallowing: Seek medical advice immediately.

## 5. Fire Fighting Measures

Extinguishing media: $CO_2$, water, dry chemical.
Protective equipment: Unknown.

## 6. Accidental Release Measures

Personal precautions: Unknown.
Environmental precautions: Absorb with inert material. Collect in closed containers and dispose of as recommended. Avoid skin contact, wear protective equipment.
Methods for cleaning up: Dispose according to Federal, State, and local regulations.
Additional information: Unknown.

## 7. Handling and Storage

Handling: Practice good hygienic measures.
Storage: Refrigeration required. Store at 2°–8°C, away from direct sunlight, initiators, oxidizing, and/or reducing agents. Over time, spontaneous polymerization may occur.

## 8. Exposure Controls/Personal Protection

| | |
|---|---|
| Personal protective equipment: | Protective gloves, goggles are recommended. |
| General measure of protection and hygiene: | Normal hygienic measures. |
| Respiration: | Not necessary. |
| Hands: | Protective gloves. |
| Eyes: | OSHA approved goggles. |

## 9. Physical and Chemical Properties

| | | |
|---|---|---|
| Appearance: | Form: | Gel. |
| | Color: | Slightly yellow. |
| | Odor: | Ester-like. |

Information on change in the physical state

| | |
|---|---|
| Melting point/melting range: | Unknown. |
| Boiling point/boiling range: | Unknown. |
| Flash point: | Unknown. |
| Autoignition temperature: | Unknown. |
| Danger of explosion: | Unlikely. |
| Density: | 1.5 gm/cm$^3$ |
| Vapor pressure: | Unknown. |
| Viscosity: | Unknown. |
| pH: | 3~4 in uncured state in water. |
| Solubility in/miscibility with Water: | Slightly. |
| Content of solvents: | None. |
| Organic solvents: | None. |
| Content of solids: | ≤50% by weight |

## 10. Stability and Reactivity

| | |
|---|---|
| Incompatibility with other substances: | Stable. Avoid exposure to peroxide and excessive heat. |
| Hazardous decomposition products: | Unknown. |

## 11. Toxicological Information

| | |
|---|---|
| Carcinogenicity: | None of the components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens. |
| TLV: | Unknown. |
| Primary routes of entry: | Inhalation, skin, and eyes. |

## 12. Ecological Information

| | |
|---|---|
| General information: | Unknown. |
| Classification of water endangerment: | Unknown. |

## 13. Disposal Considerations

| | |
|---|---|
| Disposal consideration: | Dispose in accordance with Federal, State, and local regulations. |

## 14. Transport Information

Not classified as dangerous goods.

## 15. Regulatory information

| | |
|---|---|
| Classification according to EEC guidelines: | Unknown. |
| National Prescriptions: | Unknown. |
| Classification according to VbF: | Unknown. |

## 16. Other Information

The information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof. Pentron Clinical however, makes no representations as to the completeness or accuracy of this information and supplies it on the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Pentron Clinical be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information.

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PENTRON

# SAFETY DATA SHEET

Bond-1® SF Solvent-Free SE Adhesive

## Section 1. Identification

**GHS product identifier** : Bond-1® SF Solvent-Free SE Adhesive

**Other means of identification** : Not available.

**Product type** : Liquid.

**Relevant identified uses of the substance or mixture and uses advised against**

**Product use** : Dental product: Self-etch adhesive

**Area of application** : Professional applications.

**Manufacturer** : **Pentron Clinical**
1717 West Collins Avenue
Orange, CA 92867-5422
Telephone no.: 1-203-265-7397, Toll Free: 1-800-551-0283

**e-mail address of person responsible for this SDS** : edwin.varela@kavokerrgroup.com

**Emergency telephone number (with hours of operation)** : CHEMTREC® (24 hours) U.S. : 1-800-424-9300 International: +1-703-527-3887

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Health effects are based on the uncured material.

**Classification of the substance or mixture** : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION (Fertility) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 39.3%

**GHS label elements**

**Hazard pictograms** :

**Signal word** : Warning

**Hazard statements** : Causes serious eye irritation.
Causes skin irritation.
Suspected of damaging fertility.
May cause respiratory irritation.

**Precautionary statements**

# Section 2. Hazards identification

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.

**Response** : IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Store locked up.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

**CAS number/other identifiers**

**CAS number** : Not applicable.

**Product code** : Not available.

| Ingredient name | Other names | % | CAS number |
|---|---|---|---|
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate | 7,7,9(or 7,9,9)-trimethyl-4, 13-dioxo-3,14-dioxa-5, 12-diazahexadecane-1, 16-diyl bismethacrylate | 10-30 | 72869-86-4 |
| 2-hydroxyethyl methacrylate | 2-hydroxyethyl methacrylate | 5-10 | 868-77-9 |
| 2,2'-ethylenedioxydiethyl dimethacrylate | 2,2'-ethylenedioxydiethyl dimethacrylate | 5-10 | 109-16-0 |
| diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | diphenyl(2,4, 6-trimethylbenzoyl) phosphine oxide | 0.1-1 | 75980-60-8 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

# Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : No special measures are required. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

**Inhalation** : No special measures required. If inhaled, remove to fresh air. Get medical attention if symptoms occur.

**Skin contact** : No special measures required. In case of contact, immediately flush skin with plenty of water. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Get medical attention if adverse health effects persist or are severe.

# Section 4. First aid measures

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact** : Causes skin irritation.

**Ingestion** : Irritating to mouth, throat and stomach.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : In case of major fire and large quantities: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

## Section 5. Fire-fighting measures

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

**Special protective actions for fire-fighters** : In case of major fire and large quantities: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : Low release. For professional use only. Handling of product in very small amounts or in situations where release is highly unlikely

**For emergency responders** : Low release. See also the information in "For non-emergency personnel".

**Environmental precautions** : Low release. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.

**Large spill** : Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : No special measures are required for small quantities under normal and intended conditions of product use. For professional use only. Put on appropriate personal protective equipment (see Section 8). Handle with care and dispose in a safe manner.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

None.

**Appropriate engineering controls** : No special measures are required for small quantities under normal and intended conditions of product use.

**Environmental exposure controls** : No special measures are required for small quantities under normal and intended conditions of product use.

## Individual protection measures

**Hygiene measures** : No special measures are required for small quantities under normal and intended conditions of product use.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : No special measures are required for small quantities under normal and intended conditions of product use.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : No special measures are required for small quantities under normal and intended conditions of product use.

# Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Liquid. [Gel]

**Color** : Slight. Yellow.

**Odor** : Fruity. Ester.

**Odor threshold** : Not available.

**pH** : 3 to 4 [uncured, water / Isopropyl alcohol (50/50)]

**Melting point** : Not available.

**Boiling point** : Not available.

**Flash point** : Not available.

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not applicable.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : Not available.

**Relative density** : Not available.

**Solubility** : Partially soluble in the following materials: cold water and hot water.

## Section 9. Physical and chemical properties

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not available.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**SADT** : Not available.

**Viscosity** : Not available.

**Density** : 1.5 g/cm³

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to avoid** : Avoid excessive heat. Initiators. Loss of inhibitor or heat may cause polymerization.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials and reducing materials.
Incompatible with peroxides.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| 2-hydroxyethyl methacrylate | LD50 Oral | Rat | 4230 mg/kg | - |
| 2,2'-ethylenedioxydiethyl dimethacrylate | LD50 Oral | Rat | 10837 mg/kg | - |

**Conclusion/Summary** : Based on the criteria of the protocol, this product is considered non-cytotoxic per ISO 10993-5. Based on analysis and test results, this product is considered as biocompatible per EN ISO 7405:2008 and EN ISO 10993-1:2009.

#### Irritation/Corrosion

Not available.

#### Conclusion/Summary

**Skin** : Based on the criteria of the protocol, this product is considered a negligible irritant per ISO 10993-10.

#### Sensitization

Not available.

#### Conclusion/Summary

**Skin** : Kligman score: Grade I (weak sensitizer)

#### Mutagenicity

# Section 11. Toxicological information

| Product/ingredient name | Test | Experiment | Result |
|---|---|---|---|
| Bond-1® SF Solvent-Free SE Adhesive | Bacterial Reverse Mutation Test | Experiment: In vitro<br><br>Subject: Bacteria | Negative |

**Conclusion/Summary** : No mutagenic effect.

## Carcinogenicity

Not available.

## Reproductive toxicity

Not available.

## Teratogenicity

Not available.

## Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5, 12-diazahexadecane-1,16-diyl bismethacrylate | Category 3 | Not applicable. | Respiratory tract irritation |
| 2-hydroxyethyl methacrylate | Category 3 | Not applicable. | Respiratory tract irritation |
| 2,2'-ethylenedioxydiethyl dimethacrylate | Category 3 | Not applicable. | Respiratory tract irritation |

## Specific target organ toxicity (repeated exposure)

Not available.

## Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

## Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact** : Causes skin irritation.

**Ingestion** : Irritating to mouth, throat and stomach.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations

# Section 11. Toxicological information

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : Suspected of damaging fertility.

## Numerical measures of toxicity

### Acute toxicity estimates

| Route | ATE value |
|---|---|
| Oral | 28831.9 mg/kg |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| 2-hydroxyethyl methacrylate | Acute LC50 227000 µg/l Fresh water | Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |

## Persistence and degradability

# Section 12. Ecological information

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|---|---|---|
| 2-hydroxyethyl methacrylate | 301C Ready Biodegradability - Modified MITI Test (I) | 92 to 100 % - 14 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| 2-hydroxyethyl methacrylate | - | - | Readily |

**Bioaccumulative potential**

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| 7,7,9(or 7,9,9)-trimethyl-4, 13-dioxo-3,14-dioxa-5, 12-diazahexadecane-1, 16-diyl bismethacrylate | 3 | - | low |
| 2-hydroxyethyl methacrylate | 0.42 | - | low |
| 2,2'-ethylenedioxydiethyl dimethacrylate | 1.88 | - | low |
| diphenyl(2,4, 6-trimethylbenzoyl)phosphine oxide | - | 53 to 72 | low |

**Mobility in soil**

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

# Section 14. Transport information

| | DOT Classification | IMDG | IATA |
|---|---|---|---|
| **UN number** | Not regulated. | Not regulated. | Not regulated. |
| **UN proper shipping name** | - | - | - |
| **Transport hazard class(es)** | - | - | - |
| **Packing group** | - | - | - |
| **Environmental hazards** | No. | No. | No. |
| **Additional information** | - | - | - |

# Section 14. Transport information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

# Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 5(a)2 final significant new use rules**: 2-[(2-methyl-1-oxoallyl)oxy]ethyl 1, 3-dihydro-1,3-dioxoisobenzofuran-5-carboxylate

**TSCA 8(a) PAIR**: mequinol

**TSCA 12(b) one-time export**: 2-[(2-methyl-1-oxoallyl)oxy]ethyl 1,3-dihydro-1, 3-dioxoisobenzofuran-5-carboxylate

**United States inventory (TSCA 8b)**: All components are listed or exempted.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

## SARA 302/304

### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

## SARA 311/312

**Classification** : Immediate (acute) health hazard
Delayed (chronic) health hazard

### Composition/information on ingredients

| Name | % | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|---|---|---|---|---|---|
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3, 14-dioxa-5,12-diazahexadecane-1, 16-diyl bismethacrylate | 10-30 | No. | No. | Yes. | Yes. | No. |
| 2-hydroxyethyl methacrylate | 5-10 | No. | No. | No. | Yes. | No. |
| 2,2'-ethylenedioxydiethyl dimethacrylate | 5-10 | Yes. | No. | No. | Yes. | No. |
| diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide | 0.1-1 | No. | No. | No. | No. | Yes. |

## SARA 313

Not applicable.

## State regulations

# Section 15. Regulatory information

**Massachusetts** : The following components are listed: MINERAL WOOL FIBER

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

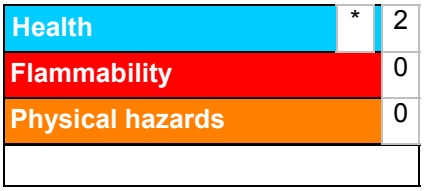
**Pennsylvania** : None of the components are listed.

**California Prop. 65**

None of the components are listed.

# Section 16. Other information

**Hazardous Material Information System (U.S.A.)**




**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

**National Fire Protection Association (U.S.A.)**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**Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.**

**History**

**Date of issue/Date of revision** : 01/05/2015

**Date of previous issue** : No previous validation

**Version** : 1

**Prepared by** : IHS

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

# Section 16. Other information

**References** : HCS (U.S.A.)- Hazard Communication Standard
International transport regulations

**Indicates information that has changed from previously issued version.**

## Notice to reader

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**