

# Weldfast CL-200 Part A Safety Data Sheet

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

- Weldfast CL-200 Part A

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

- Vinyl ester adhesive for joining fiberglass reinforced plastic products.
- This product is intended to be mixed only with its specific catalyst; Weldfast CL-200 Part B

### 1.3 Details of the supplier of the safety data sheet

- NOV Fiber Glass Systems  
17115 San Pedro Avenue, Suite 200  
San Antonio, Texas 78232 USA  
Tel: 1-210-477-7500  
Fax: 1-210-231-5915  
E-mail: Mike.Thayer@nov.com

### 1.4 Emergency telephone number(s)

- 3E Company, 24-Hour Support (Access Code/Contract Number: 333386)
  - USA, Canada ..... 1-888-298-2344
  - Asia, Pacific ..... 1-760-476-3960
  - Europe, Middle East, Africa ..... 1-760-476-3961
  - Americas ..... 1-760-476-3962

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## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Physical

- Flammable liquids, Category 3

#### Health

- Acute toxicity, Category 4 (inhalation)
- Skin irritation, Category 2
- Eye irritation – Category 2A
- Reproductive toxicity, Category 2
- Specific target organ systemic toxicity – single exposure, Category 3 (respiratory tract irritation)
- Specific target organ systemic toxicity – repeated exposure, Category 1 (ototoxicity, nervous system)

#### Environmental

- Acute aquatic toxicity, Category 2

## 2.2 Label elements

### Signal Word(s)

- DANGER

### Pictogram(s)



### Hazard Statements

- Physical
  - H226: Flammable liquid and vapor
- Environmental
  - H401: Toxic to aquatic life
- Health
  - H315: Causes skin irritation
  - H317: May cause an allergic skin reaction
  - H319: Causes serious eye irritation
  - H332: Harmful if inhaled
  - H335: May cause respiratory irritation
  - H361d: Suspected of damaging the unborn child
  - H372: Causes damage to the nervous system through prolonged or repeated exposure via inhalation

### Precautionary Statements

- Prevention
  - P201: Obtain special instructions before use
  - P202: Do not handle until all safety precautions have been read and understood
  - P210: Keep away from heat/sparks/open flames/hot surfaces; no smoking
  - P233: Keep container tightly closed
  - P242: Use only non-sparking tools
  - P260: Do not breathe dust/fume/gas/mist/vapor/spray
  - P264: Wash skin thoroughly after handling
  - P270: Do not eat, drink or smoke when using this product
  - P271: Use only outdoors or in well-ventilated area
  - P273: Avoid release to the environment
  - P280: Wear protective gloves/protective clothing/eye protection/face protection
- Response
  - P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
  - P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P308+P311: If exposed or concerned: Call a POISON CENTER or doctor/physician
  - P308+P313: IF exposed or concerned: Get medical advice/attention
  - P331: Do NOT induce vomiting
  - P332+P313: If skin irritation occurs: Get medical advice/attention
  - P337+P313: If eye irritation persists: Get medical advice/attention
  - P362+P364: Take off all contaminated clothing and wash it before reuse
  - P370+P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
- Storage
    - P403+P233: Store in a well-ventilated place. Keep container tightly closed.
    - P403+P235: Store in a well-ventilated place. Keep cool.
  - Disposal
    - P501: Dispose of contents/container in accordance with regulatory requirements.

### 2.3 Other Hazards

- PBT and vPvB assessment
  - None of the ingredients are considered to be either PBT or vPvB.
- Warning: The cured adhesive product may form combustible dust concentrations in air when sanded, grinded, or cut.

## SECTION 3: Composition/information on Ingredients

### 3.1 Substances

- Not applicable

### 3.2 Mixtures

| Chemical Identity  | CAS No.        | EC No.         | Concentration Range (weight %) |
|--|----------------|----------------|--------------------------------|
| Styrene  | 000100-42-5    | 202-851-5      | 20 – 25                        |
| Glass Fiber  | 065997-17-3    | 266-046-0      | 5 – 15                         |
| Hydroxyethyl Methacrylate  | 000868-77-9    | 212-782-2      | 1 – 3                          |
| Substances that do not meet the classification and labeling criteria established under the GHS | Not applicable | Not applicable | Balance                        |

## SECTION 4. First-aid measures

### 4.1 Description of first-aid measures

#### Inhalation

- Move to fresh air
- If difficulty in breathing or respiratory irritation; seek immediate medical attention
- If breathing has stopped; seek immediate medical attention, perform artificial respiration

#### Skin contact

- Wash affected area thoroughly with soap and water for at least 20 minutes
- If irritation develops or persists; seek medical attention

#### Eye contact

- Immediately flush with water for at least 20 minutes
- Remove contact lenses, if present
- If irritation develops or persists, seek medical attention

#### Ingestion

- Do not induce vomiting unless directed to do so by medical personnel
- Never give anything by mouth to an unconscious person
- If symptoms persist, seek immediate medical attention

### **4.2 Most Important symptoms and effects, both acute and delayed**

#### Acute

- Short-term overexposure to styrene may result in the following:
  - Headache, fatigue, insomnia, anorexia and weight loss, pain in limbs, nervousness, impairment of memory

#### Delayed

- Prolonged overexposure to styrene may result in the following:
  - Transitory EEG anomalies, immune system changes, and liver damage

### **4.3 Indication of any immediate medical attention and special treatment needed**

- For acute or short-term repeated exposures to inhalation of styrene:
  - Severe exposures should have cardiac monitoring to detect arrhythmia
  - Catecholamines, especially epinephrine (adrenaline) should be used cautiously (if at all)
  - Aminophylline and inhaled beta-two selective bronchodilators (e.g., salbutamol) are the drugs of choice for treatment of bronchospasm

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## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

- Water spray, alcohol-resistant foam, dry chemical, carbon dioxide.

### **5.2 Specific hazards arising from the substance or mixture**

- Styrene vapors are flammable.
- Moderate fire and explosion hazards when exposed to heat or flame.

- Styrene vapors may travel considerable distance to source of ignition.
- Heating may cause containers to rupture.
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

### **5.3 Advice for firefighters**

- Wear self-contained breathing apparatus and protective clothing, as necessary.
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## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

- Due to the high viscosity of this adhesive product and the relatively small end-use container size, significant spills are unlikely to occur.
- If a spill does occur, remove all sources of ignition in the area.
- Use only non-sparking tools during cleanup and place discarded material into a suitable container.

### **6.2 Environmental precautions**

- Do not allow spilled materials to enter storm sewers, sanitary sewers, or impact groundwater.
- Do not allow spilled materials to remain on the ground.

### **6.3 Methods and materials for containment and cleaning up**

- Use only non-sparking tools during cleanup and place discarded material into a suitable container for disposal.
- Avoid dispersal of dust in the air (i.e., cleaning dusty surfaces with compressed air) as this can contribute to a combustible dust hazard.

### **6.4 Reference to other sections**

- See also, *SECTION 8: Control parameters* and *SECTION 13: Disposal considerations*.
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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

- Avoid contact with skin and eyes and inhalation of vapors.
- Avoid sources of ignition, including smoking while using this product.
- Thoroughly wash exposed skin after working with this product.
- Only use this product in a well-ventilated area.
- Use spark-free tools.
- Empty containers may contain product residue and may be hazardous.
- Minimize generation of dust when sanding, grinding, and cutting the cured product.
- Routine housekeeping should be instituted to ensure that product dusts do not accumulate on surfaces.

### **7.2 Conditions for safe storage, including any incompatibilities**

- Store in cool location away from ignition sources or direct sunlight.
- Avoid prolonged exposure to temperatures in excess of 38°C (100°F).

- Material is flammable: keep away from heat, sparks, and open flames.
- Store in original containers or in containers of the same construction material as original containers.

### 7.3 Specific end use(s)

- No additional data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Styrene**  
CAS No. 000100-42-5

| Country                   | Occupational Exposure Limit (OEL) Values |                       | Legal Basis  |
|---------------------------|--|-----------------------|--|
|                           | Eight Hour TWA                           | Fifteen Minute STEL   |  |
| Australia                 | 50 ppm                                   | 100 ppm               | Workplace Exposure Standards for Airborne Contaminants   |
| Austria                   | 20 ppm                                   | 80 ppm                | Austrian OEL Regulation  |
| Belgium                   | 50 ppm                                   | 100 ppm               | limites d'exposition professionnelle – VLEP/ Grenswaarden voor beroepsmatige blootstelling – GWBB          |
| Canada - Alberta          | 20 ppm                                   | 40 ppm                | Occupational Safety and Health Code  |
| Canada – British Columbia | 50 ppm                                   | 75 ppm                | Occupational Health and Safety Regulation, Table of Exposure Limits for Chemical and Biological Substances |
| Canada - Manitoba         | 20 ppm                                   | 40 ppm                | Workplace Safety and Health Act, Part 36   |
| Canada - Ontario          | 35 ppm                                   | 100 ppm               | Regulation 883, Control of Exposure to Biological or Chemical Agents                                       |
| Canada - Quebec           | 50 ppm                                   | 100 ppm               | Regulation respecting occupational safety and health   |
| Canada - Saskatchewan     | 20 ppm                                   | 40 ppm                | The Occupational Safety and Health Regulations   |
| China                     | 50 mg/m <sup>3</sup>                     | 100 mg/m <sup>3</sup> | GBZ 2.1-2007, Occupational exposure limits for hazardous agents in the workplace                           |
| Denmark                   | 25 ppm                                   | 25 ppm                | Grænseværdier for stoffer og materialer  |
| France                    | 50 ppm                                   | None established      | Institut National de Recherche et de Sécurité (INRS)   |
| Germany (AGS)             | 20 ppm                                   | 40 ppm                | Technical Rule for Hazardous Substances (TRGS) No. 900   |
| Germany (DFG)             | 20 ppm                                   | 40 ppm                | List of MAK and BAT Values   |
| Hungary                   | 50 mg/m <sup>3</sup>                     | 50 mg/m <sup>3</sup>  | Decree 25/2000 (IX.30) on the Chemical Safety on Workplaces  |
| Ireland                   | 20 ppm                                   | 40 ppm                | Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations                  |
| Japan                     | 50 ppm                                   | None established      | Administrative Control Levels for chemical substances  |

|                |                      |                       |   |
|----------------|----------------------|-----------------------|---|
| Latvia         | 10 mg/m <sup>3</sup> | 30 mg/m <sup>3</sup>  | Standard LVS 89:2004, Occupational exposure limit values of chemical substances in work environment         |
| Malaysia       | 20 ppm               | None established      | Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations |
| New Zealand    | 50 ppm               | 100 ppm               | Workplace Exposure Standards and Biological Exposure Indices  |
| Poland         | 50 mg/m <sup>3</sup> | 200 mg/m <sup>3</sup> | Principles and Methods of Assessing the Working Environment   |
| Singapore      | 50 ppm               | 100 ppm               | Workplace Safety and Health (General Provisions) Regulations  |
| South Korea    | 20 ppm               | 40 ppm                | [Need reference]  |
| Spain          | 20 ppm               | 40 ppm                | Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT)   |
| Sweden         | 10 ppm               | 20 ppm                | Occupational Exposure Limit Values and Measures Against Air Contaminants (AFS 2005:17)                      |
| Switzerland    | 20 ppm               | 40 ppm                | Verordnung über die Verhütung von Unfällen und Berufskrankheiten (VUV)", Art. 50 Abs.3                      |
| USA (ACGIH)    | 20 ppm               | 40 ppm                | None  |
| USA (NIOSH)    | 50 ppm               | 100 ppm               | NIOSH Pocket Guide to Chemical Hazards (Recommendations Only)   |
| USA (OSHA)     | 100 ppm              | None established      | 29 CFR 1910 Subpart Z, Toxic and Hazardous Substances   |
| United Kingdom | 100 ppm              | 250 ppm               | EH40 Workplace exposure limits  |

**Glass Fiber (continuous filament glass fibers) <sup>[1]</sup>**  
**CAS No. 065997-17-3**

| Country                   | Occupational Exposure Limit (OEL) Values                                   |  | Legal Basis  |
|---------------------------|--|--|--|
|                           | Eight Hour TWA   | Fifteen Minute STEL  |  |
| Australia                 | 2 mg/m <sup>3</sup> (inhalable dust)                                       | None established   | Workplace Exposure Standards for Airborne Contaminants   |
| Canada – British Columbia | 1 fiber/cc   | None established   | Occupational Health and Safety Regulation, Table of Exposure Limits for Chemical and Biological Substances |
| Canada - Ontario          | 1 fiber/cc   | None established   | Regulation 883, Control of Exposure to Biological or Chemical Agents                                       |
| Canada - Manitoba         | 1 fiber/cc   | None established   | Workplace Safety and Health Act, Part 36   |
| Canada - Quebec           | 1 fiber/cc   | None established   | Regulation respecting occupational safety and health   |
| Canada - Saskatchewan     | 1 fiber/cc (respirable fibers)<br>5 mg/m <sup>3</sup> (inhalable fraction) | 3 fibers/cc (respirable fibers)<br>10 mg/m <sup>3</sup> (inhalable fraction) | The Occupational Safety and Health Regulations   |
| New Zealand               | 1 fiber/cc   | None established   | Workplace Exposure Standards and Biological Exposure Indices   |
| Singapore                 | 10 mg/m <sup>3</sup> (fibrous glass dust)                                  | None established   | Workplace Safety and Health (General Provisions) Regulations   |
| USA (ACGIH)               | 1 fiber/cc   | None established   | None   |

|             |            |                  |   |
|-------------|------------|------------------|---|
| USA (NIOSH) | 3 fiber/cc | None established | NIOSH Pocket Guide to Chemical Hazards (Recommendations Only) |
|-------------|------------|------------------|---|

<sup>[1]</sup> This material is incorporated into the adhesive mixture and exposure via inhalation is not likely to occur unless the cured product is subjected to finishing operations such as sanding, grinding, cutting, etc.

**Hydroxyethyl Methacrylate**  
CAS No. 000868-77-9

| Country                                 | Occupational Exposure Limit (OEL) Values |                     | Legal Basis |
|---|--|---------------------|-------------|
|   | Eight Hour TWA                           | Fifteen Minute STEL |             |
| No OELs were found for this ingredient. |  |                     |             |

**Particulates not otherwise classified/regulated (PNOC / PNOR)** (may be generated if cured product is subjected to sanding, grinding, cutting, etc.)  
CAS No. – Not applicable

| Country                   | Occupational Exposure Limit (OEL) Values                              |                     | Legal Basis   |
|---------------------------|---|---------------------|---|
|                           | Eight Hour TWA  | Fifteen Minute STEL |   |
| Austria                   | 10 mg/m <sup>3</sup> (inhalable)                                      | None established    | Workplace Exposure Standards for Airborne Contaminants  |
| Belgium                   | 10 mg/m <sup>3</sup>  | None established    | limites d'exposition professionnelle – VLEP/ Grenswaarden voor beroepsmatige blootstelling – GWBB           |
| Canada - Alberta          | 10 mg/m <sup>3</sup> (total)<br>3 mg/m <sup>3</sup> (respirable)      | None established    | Occupational Safety and Health Code   |
| Canada – British Columbia | 10 mg/m <sup>3</sup> (total dust)<br>3 mg/m <sup>3</sup> (respirable) | None established    | Occupational Health and Safety Regulation, Table of Exposure Limits for Chemical and Biological Substances  |
| Canada - Manitoba         | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable)  | None established    | Workplace Safety and Health Act, Part 36  |
| Canada - Ontario          | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable)  | None established    | Regulation 883, Control of Exposure to Biological or Chemical Agents  |
| Canada - Quebec           | 10 mg/m <sup>3</sup> (total dust)                                     | None established    | Regulation respecting occupational safety and health  |
| China                     | 3 mg/m <sup>3</sup> (fiberglass reinforced plastic dust)              | None established    | GBZ 2.1-2007, Occupational exposure limits for hazardous agents in the workplace                            |
| Ireland                   | 10 mg/m <sup>3</sup> (inhalable)<br>4 mg/m <sup>3</sup> (respirable)  | None established    | Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations                   |
| Malaysia                  | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable)  | None established    | Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations |
| New Zealand               | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable)  | None established    | Workplace Exposure Standards and Biological Exposure Indices  |
| Singapore                 | 10 mg/m <sup>3</sup> (nuisance)                                       | None established    | Workplace Safety and Health (General Provisions) Regulations  |
| South Korea               | 10 mg/m <sup>3</sup>  | None established    | [Need reference]  |
| USA (ACGIH)               | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable)  | None established    | None  |
| USA (OSHA)                | 15 mg/m <sup>3</sup> (total dust)<br>5 mg/m <sup>3</sup> (respirable) | None established    | 29 CFR 1910 Subpart Z, Toxic and Hazardous Substances   |



|                |  |                  |                                |
|----------------|--|------------------|--------------------------------|
| United Kingdom | 10 mg/m <sup>3</sup> (inhalable)<br>4 mg/m <sup>3</sup> (respirable) | None established | EH40 Workplace exposure limits |
|----------------|--|------------------|--------------------------------|

## 8.2 Exposure controls

### Appropriate engineering controls

- Provide adequate general and local exhaust ventilation to control airborne concentrations to below the occupational exposure limit values.
- When sanding, cutting, grinding the cured product, it is recommended that all dust control equipment contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

### Personal protective equipment

- Eye and face protection
  - Approved safety glasses with side shields (e.g., ANSI Z87, EN166)
- Skin protection
  - Hand protection: Nitrile rubber gloves are generally recommended for styrene. Different glove materials, thicknesses, and from different glove manufacturers may provide varying degrees of protection. Temperature and specific use can impact glove effectiveness. Some gloves may be intended to be used only once and then discarded, while others may be used for longer periods of time. The glove supplier should provide the user with information regarding permeability and breakthrough time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
  - Other skin protection: Such clothing as to minimize or eliminate the chance of skin contact with the adhesive product.
- Respiratory protection
  - If ventilation is insufficient to keep airborne concentrations below the occupation exposure limit levels, full or half-mask respirator fitted with organic vapor cartridges (for styrene) and/or particulate filters (for sanding, grinding, cutting, etc. cured material). Filter masks may be of limited use in cases of high or unknown exposure.

### Environmental exposure controls

- Do not flush into surface water or sanitary sewer system.
- Do not place directly onto ground.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|   |                          |
|---|--------------------------|
| - Appearance                              | Purple thixotropic paste |
| - Odor                                    | Sweet (styrene)          |
| - Odor threshold                          | < 1 ppm (styrene)        |
| - pH                                      | No data available        |
| - Melting point/freezing point            | -31°C / -24°F (styrene)  |
| - Initial boiling point and boiling range | 145°C / 293°F (styrene)  |

|  |  |
|--|--|
| - Flash point                                  | 32°C / 90°F, TCC-ASTM D56 (styrene)<br>31-32°C / 88-90°F, ACC-IP 170 (styrene) |
| - Evaporation rate                             | No data available  |
| - Flammability (solid, gas)                    | No data available  |
| - Upper/lower flammability or explosive limits | 0.9% / 6.8% (styrene)  |
| - Vapor pressure                               | 4.5 mmHg @ 20°C / 68°F (styrene)   |
| - Vapor density (air = 1)                      | 3.6 (styrene)  |
| - Relative density                             | No data available  |
| - Solubility(ies)                              | 0.032 wt% in water @ 20°C / 68°F (styrene)                                     |
| - Partition coefficient: n-octanol/water       | Log Pow: 2,96 @ 25°C / 77°F (styrene)  |
| - Auto-ignition temperature                    | 490°C / 914°F (styrene)  |
| - Decomposition temperature                    | No data available  |
| - Viscosity                                    | 75,000-131,00 cP @ 26°C / 78°F   |
| - Explosive properties                         | No data available  |
| - Oxidizing properties                         | No data available  |

## 9.2 Other information

- No data available.

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

- No decomposition expected if product is stored and used as directed.

### 10.2 Chemical stability

- Product is stable under normal conditions of storage and use.

### 10.3 Possibility of hazardous reactions

- Organic peroxides cause exothermic reactions.

### 10.4 Conditions to avoid

- Excessive heat, flames, and sparks.
- Avoid unintended mixing with organic peroxide catalyst.

### 10.5 Incompatible materials

- Styrene is corrosive to copper and copper-bearing alloys.
- Avoid contact with oxidizing materials and unintended mixing with organic peroxide catalyst.

### 10.6 Hazardous decomposition products

- On combustion, may emit toxic fumes of carbon monoxide (CO).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

- Styrene: Moderate acute toxicity via inhalation route of exposure.
- Styrene: Low acute toxicity via oral and dermal routes of exposure.
- Styrene: May be fatal if swallowed and enters the airways.

#### Irritation

- Product: Thick, sticky paste; may cause skin and eye irritation upon contact and removal.
- Styrene: Moderate irritation to the skin and eyes.

#### Corrosivity

- Not corrosive.

#### Sensitization

- May result in skin sensitization.

#### Repeated dose toxicity

- Styrene: May cause deafness after repeated inhalation as well as loss of color vision.

#### Carcinogenicity

- Styrene: Listed by NTP as reasonably anticipated to be a human carcinogen and by IARC as a group 2B carcinogen (possibly carcinogenic to humans).

#### Mutagenicity

- Styrene: Not expected to have mutagenic effects.

#### Toxicity for reproduction

- Styrene: Several studies suggest that reproductive and developmental effects in humans following exposure are not a major concern.

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## SECTION 12: Ecological information

### 12.1 Toxicity

#### Acute toxicity

- Styrene: Fish (*Pimephales promelas*), LC50 (96-hour), 4.02 to 10 mg/L
- Styrene: Aquatic invertebrates (*Daphnia magna*), EC50 (48-hour), 4.7 mg/L
- Styrene: Algae (*Selenastrum capricornutum*), EC50 (72-hour), 4.9 mg/L
- Styrene: Microorganisms/Effect on activated sludge, EC20 (30 minutes), 140 mg/L

#### Chronic toxicity

- Styrene: Fish, NOEC based on modeling, 0.1 to 1 mg/L

- Styrene: Aquatic invertebrates (*Daphnia magna*), NOEC (21-day), 1.01 mg/L
- Styrene: Soil-living organisms, LC50 (14-day), 120 mg/kg

### 12.2 Persistence and degradability

- Product: No data is available.
- Styrene: Readily biodegradable and does not bioaccumulate.

### 12.3 Bioaccumulative potential

- Product: No data is available.
- Styrene: Not bioaccumulative.

### 12.4 Mobility in soil

- Product: No data is available.
- Styrene: Rapidly evaporates; potential for mobility in soil is low.

### 12.5 Results of PBT and vPvB assessment

- Product: No data is available.
- Styrene: Does not fulfill criteria.

### 12.6 Other adverse effects

- No additional data is available.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

- Must be disposed of in accordance with local regulatory requirements.
- Land disposal of uncured product is discouraged and illegal in many jurisdictions.
- Sewer disposal is discouraged.
- Empty containers may contain hazardous residue and must be disposed accordingly.

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## SECTION 14: Transport information

- The transport information provided below conforms to the following:
  - UN Model Regulations
  - International Carriage of Dangerous Goods by Road (ADR)
  - International Carriage of Dangerous Goods by Rail (RID)
  - International Carriage of Dangerous Goods by Inland Waterways (ADN)
  - International Maritime Dangerous Goods (IMDG) Code
  - International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air

If offered alone, the classification is as described below

If offered with the catalyst within the same inner packaging, the classification is as described below

|  |   |   |
|--|---|---|
| <b>14.1 UN number</b>  | 1133  | 3269  |
| <b>14.2 UN proper shipping name</b>  | ADHESIVES containing flammable liquid                                     | POLYESTER RESIN KIT   |
| <b>14.3 Transport hazard class(es)</b>   | 3   | 3   |
| <b>14.4 Packing group</b>  | III   | III   |
| <b>14.5 Environmental hazards</b>  | None  | None  |
| <b>14.6 Special precautions for user</b>   | None  | None  |
| <b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Product is not offered nor intended to be transported in bulk quantities. | Product is not offered nor intended to be transported in bulk quantities. |

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The regulatory information provided below may not be comprehensive.

#### Canada

- Federal

#### **Controlled Products Regulation**

- This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

#### **Ingredient Disclosure List**

- All components of this mixture that are on the IDL above their specified concentration are disclosed in this SDS.

#### United States

- Federal

#### **CAA Accidental Release Prevention**

- The following ingredients are listed: None

#### **CAA Hazardous Air Pollutants**

- The following ingredients are listed: Styrene (CAS 100-42-5)

#### **CERCLA/Superfund Hazardous Substances EPCRA Reportable Quantities**

- The following ingredients are listed: Styrene (CAS 100-42-5): 1,000 pounds (454 kg)

#### **CWA Hazardous Air Pollutants**

- The following ingredients are listed: Styrene (CAS 100-42-5)

#### **OSHA Highly Hazardous Chemicals**

- The following ingredients are listed: None

**RCRA Hazardous Waste**

- Uncured product may be characteristically hazardous for ignitability (D001)

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

- The following ingredients are listed: None

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

- The following ingredients are listed: None

**SARA (311/312) Hazard Categories**

- Acute-Chronic-Fire-Reactivity

**SARA 313 Emission Reporting**

- The following ingredients are listed Styrene (CAS 100-42-5)

- State

**Styrene (CAS 100-42-5) can be found on the following state right to know lists**

- California, Florida, Massachusetts, Minnesota, New Jersey, Pennsylvania, Rhode Island

**15.2 Chemical safety assessment**

- Not required.

**SECTION 16: Other information**

Revision history

| Revision Number | Revision Date | Revision Description  |
|-----------------|---------------|---|
| 1               | 25-JUL-2013   | Initial SDS creation in conformance with OSHA hazard communication standard (29 CFR 1910.1200) and UN Globally Harmonized System (GHS). |
| 2               | 27-NOV-2013   | Reformatted entire SDS.   |
| 3               | 3-APR-2014    | Reformatted entire SDS and added information in conformance with Regulation (EC) No. 1907/2006 (REACH).                                 |

Legend to abbreviations and acronyms used

- ACC Abel Closed Cup
- ACGIH American Conference of Governmental Industrial Hygienists
- ANSI American National Standards Institute
- ASTM American Society for Testing and Materials
- °C Degrees Celsius
- CAA Clean Air Act
- CAS No. Chemical Abstract Service registry Number
- cc cubic centimeter

- cP centipoise
- CFR Code of Federal Regulations (US)
- CWA Clean Water Act
- EC50 Effective Concentration halfway between the baseline and maximum
- EC No. Number allocated by the Commission of the European Communities as a term used to replace the EINECS / ELINCS / NLP number designation
- EEG Electroencephalogram
- EN European Standard (French: *Européenne Norme*)
- EPCRA Emergency Planning and Community Right-to-Know Act
- °F Degrees Fahrenheit
- IARC International Agency for Research on Cancer
- GHS Globally Harmonized System of Classification and Labeling of Chemicals
- IBC Code International Bulk Chemical Code
- IP Institute of Petroleum standards
- LC50 Lethal Concentration for 50% of the of the test population
- MARPOL Marine Pollution
- mg/L milligrams per liter
- mg/m<sup>3</sup> milligrams per cubic meter
- mmHg millimeters of mercury
- NIOSH National Institute for Occupational Safety and Health
- NOEC No Observed Effects Concentration
- NTP National Toxicological Program
- OSHA Occupational Safety and Health Administration (US)
- PBT Persistent Bioaccumulative and Toxic
- ppm parts per million
- RCRA Resource Conservation and Recovery Act
- SARA Superfund Amendments and Reauthorization Act
- STEL Short-Term Exposure Limit
- TCC Tag Closed Cup
- TWA Time-Weighted Average
- vPvB very Persistent and very Bioaccumulative
- wt% weight percent

#### Key literature references and sources for data

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