SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: 1202  Product Code: 1202
Trade Name: Glyptal
Manufactured by: GLYPTAL, INC.
305 Eastern Ave.
Chelsea, MA 02150
Telephone (617) 884-6918

IN CASE OF EMERGENCY:
CHEMTREC 1-800-424-9300

Product Use: Coatings
Not recommended for: Nonindustrial Use

Section 2 - Hazards Identification

NFPA Ratings, risk phrases, and suggested WHMIS Hazard Categories:

GHS Ratings:

<table>
<thead>
<tr>
<th>Property</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquid</td>
<td>3</td>
<td>Flash point &gt;= 23°C and &lt;= 60°C (140°F)</td>
</tr>
<tr>
<td>Dermal Toxicity</td>
<td>Acute Tox. 4</td>
<td>Dermal&gt;1000+&lt;=2000mg/kg</td>
</tr>
<tr>
<td>Inhalation Toxicity</td>
<td>Acute Tox. 4</td>
<td>Gases&gt;2500+&lt;=5000ppm, Vapors&gt;10+&lt;=20mg/l, Dusts&amp;mists&gt;1+&lt;=5mg/l</td>
</tr>
<tr>
<td>Skin corrosive</td>
<td>2</td>
<td>Reversible adverse effects in dermal tissue, Draize score: &gt;= 2.3 &lt; 4.0 or persistent inflammation</td>
</tr>
<tr>
<td>Eye corrosive</td>
<td>2A</td>
<td>Eye irritant: Subcategory 2A, Reversible in 21 days</td>
</tr>
<tr>
<td>Carcinogen</td>
<td>2</td>
<td>Limited evidence of human or animal carcinogenicity</td>
</tr>
<tr>
<td>Organ toxin single exposure</td>
<td>3</td>
<td>Transient target organ effects- Narcotic effects- Respiratory tract irritation</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>1</td>
<td>Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity &lt; or = 20.5 mm2/s at 40° C.</td>
</tr>
<tr>
<td>Aquatic toxicity</td>
<td>C3</td>
<td>Acute toxicity &gt; 10.0 but &lt; 100.0 mg/l and lack of rapid degradability and log Kow &gt; 4 unless BCF &lt; 500 and unless chronic toxicity &gt; 1 mg/l</td>
</tr>
</tbody>
</table>

GHS Hazards

H226 Flammable liquid and vapour
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H351 Suspected of causing cancer
H401 Toxic to aquatic life

GHS Precautions

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
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/light/.../equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>Weight Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene (mixed isomers)</td>
<td>1330-20-7</td>
<td>40.00% - 50.00%</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>1.00% - 5.00%</td>
</tr>
</tbody>
</table>

Section 4 - First Aid Measures

INHALATION - Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician as further medical treatment may be necessary. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. If irritation persists, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water. If symptoms persist, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

INGESTION - If material is ingested, seek immediate medical attention. Do not induce vomiting. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Contact a poison control center.
center, emergency room, or physician as further medical treatment will be necessary.

**Section 5 - Fire Fighting Measures**

**Flash Point:** 29 C (84 F)  
**LEL:** 1.00  
**UEL:** 7.00

**EXTINGUISHING MEDIA:** Use carbon dioxide (CO2), "alcohol" foam, dry chemical

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Closed containers may explode or burst when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat.

**HAZARDOUS COMBUSTION PRODUCTS:** See section 10 for a list of hazardous decomposition products for this mixture.

**FIRE FIGHTING:** Water spray may be ineffectve. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

**FIRE FIGHTING EQUIPMENT:** Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).

---

**Section 6 - Accidental Release Measures**

**SPILL AND LEAK PROCEDURES:** Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

**SMALL SPILLS:** Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

**LARGE SPILLS:** Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.
Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 50 to 85 F (10 to 30 C).

STORAGE: Prevent from freezing. Do not store above 95 F (35 C).

Store only in original containers.

Section 8 - Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene (mixed isomers)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1330-20-7</td>
<td>PEL 100 ppm - TWA</td>
<td>TLV 100 ppm - TWA</td>
<td>Not Established</td>
</tr>
<tr>
<td></td>
<td>PEL 150 ppm - STEL</td>
<td>TLV 150 ppm - STEL</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>STEL - 125 ppm (Z-1)</td>
<td>STEL - 125 ppm TLV</td>
<td>Not Established</td>
</tr>
<tr>
<td>100-41-4</td>
<td>TWA - 100 ppm (Z-1)</td>
<td>TWA - 20 ppm TLV</td>
<td></td>
</tr>
</tbody>
</table>

ENGINEERING: Provide general dilution of local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108.

PERSONAL PROTECTIVE EQUIPMENT

EYES:
Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

PROTECTIVE GLOVES:
Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. If necessary, wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

RESPIRATORY PROTECTION:
Respiratory protection may not be needed if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. Where ventilation is inadequate, use a NIOSH/MSHA-approved, air-purifying
respirator equipped with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

**CONTAMINATED EQUIPMENT:** Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

### Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Amber Liquid</td>
</tr>
<tr>
<td><strong>Physical State</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>6.9 mm Hg @ 60 °F</td>
</tr>
<tr>
<td><strong>Boiling Range</strong></td>
<td>136 to 144 °C</td>
</tr>
<tr>
<td><strong>Lbs VOC/Gallon Solids</strong></td>
<td>10.1</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Solvent odor</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Heavier than air</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Slower than ether</td>
</tr>
<tr>
<td><strong>Specific Gravity (SG)</strong></td>
<td>0.972</td>
</tr>
<tr>
<td><strong>Lbs VOC/Gallon Less Water</strong></td>
<td>4.05 and Exempt Solvent</td>
</tr>
</tbody>
</table>

### Section 10 - Stability and Reactivity

**Stability:**

STABLE

**Components of this mixture are incompatible with the following materials:**

- Strong oxidizing agents

**This mixture is likely to exhibit the following combustion products:**

- Carbon Dioxide, Carbon Monoxide

Hazardous polymerization will not occur.

### Section 11 - Toxicological Information

**Component Toxicity**

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 Xylene</td>
<td>Oral LD50: 4,300 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>Oral LD50: 3,500 mg/kg (Rabbit)</td>
</tr>
</tbody>
</table>

Toxicological information: The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 3 and 15 for details.

**Routes of Entry:**

- Inhalation
- Skin Contact
- Eye Contact

**Exposure to this material may affect the following organs:**

- Kidneys
- Liver
- Central Nervous System
- Reproductive System

**Effects of Overexposure**

<table>
<thead>
<tr>
<th>Component</th>
<th>Effects Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>Chronic exposure to ethyl benzene causes fatigue, headache, and eye and upper respiratory tract irritation. Repeated contact with the skin may cause drying, defatting, and dermatitis.</td>
</tr>
</tbody>
</table>
Eye Contact  May cause eye irritation. Vapor may be irritating to eyes.

Ingestion  Aspiration hazard if swallowed. Can enter lungs and cause damage. May be fatal if swallowed. Possible pneumonia if vomited.

Inhalation  May cause respiratory tract irritation. May cause mucous membrane irritation. Can cause central nervous system (CNS) depression. Exposure at high concentrations may cause narcosis. Symptoms of narcosis include fatigue, drowsiness, staggering gait, and incoordination.

Skin Contact  Absorbed through skin. May cause skin irritation. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

1330-20-7  Xylene (mixed)  Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

Eye Contact  May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion  Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation  Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Skin Contact  Can cause skin irritation. Prolonged and repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of the skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). See Section 15 for carcinogenicity assessment.

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-41-4</td>
<td>Ethylbenzene</td>
<td>1 to 5%</td>
<td>IARC (2B)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH (A3)</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information
Component Ecotoxicity
Xylene (mixed isomers)

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

Ethylbenzene

12.1 Toxicity
Toxicity to fish flow-through test LC50 - Menidia menidia (Atlantic silverside) - 5.1 mg/l - 96 h

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 1.8 - 2.4 mg/l - 48 h other aquatic invertebrates static test

Toxicity to algae static test EC50 - Skeletonema costatum - 4.9 mg/l - 72 h

12.2 Persistence and degradability
Biodegradability aerobic - Exposure time 28 d Result: 70 - 80 % - Readily biodegradable

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

Section 13 - Disposal Considerations

Do not allow into drains or water courses.

Waste and emptied containers must be disposed of in accordance with:
- Control of Pollution Act of 1974,
- Special Waste Regulations 1996,

Waste should be recycled or disposed of through a licensed waste management facility.

**Section 14 - Transport Information**

This material is classified for transport as follows:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Resin Solution</td>
<td>1866</td>
<td>III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Section 15 - Regulatory Information**

According to the Directive (1999/45/EC), relating to the classification, packaging and labelling of dangerous substances and preparations, the product is labelled as follows:

**State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** WARNING!

This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- Ethylbenzene 1 to 5%

**Carcinogenicity:**

**IARC:** Group 2B: Possibly carcinogenic to humans

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Ethylbenzene 100-41-4

**Commonwealth of Massachusetts "Right to Know":** This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

- Ethylbenzene 1 to 5%
- Xylene (mixed isomers) 1330-20-7

**New Jersey Worker and Community Right To Know Hazardous Substance List:** The following substances appear on the New Jersey Right To Know Hazardous Substance List.

- Ethylbenzene 1 to 5%
- Xylene (mixed) 40 to 50%
Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

- 100-41-4
- 1330-20-7

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulation</th>
<th>All Components Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations, part 372.

Section 16 - Other Information

Hazardous Material Information System (HMIS)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

HMIS & NFPA Hazard Rating Legend
- * = Chronic Health Hazard
- 0 = INSIGNIFICANT
- 1 = SLIGHT
- 2 = MODERATE
- 3 = HIGH

National Fire Protection Association (NFPA)

Flammability

Health

Instability

Special

NON-WARRANTY. The information presented in this publication is based upon the research and experience of Glyptal, Inc. No representation or warranty is made concerning the accuracy or completeness of the information presented in this publication. Glyptal, Inc. makes no warranty or representation of any kind, express or implied, including without limitation any warranty of merchantability or fitness for any particular purpose, and no warranty or representation shall be implied by law or otherwise. Any products sold by Glyptal, Inc. are not warranted as suitable for any particular purpose to the buyer. The suitability of any products for any purpose particular to the buyer is for the buyer to determine. Glyptal, Inc. shall in no event be liable for any special, incidental, or consequential damages.

The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Glyptal, Inc., and to recommend precautionary measures for the storage and handling of the products. No liability can be assumed for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Date Prepared: 6/3/2015

Reviewer Revision