# 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Code:</th>
<th>VF100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name:</td>
<td>VF-100</td>
</tr>
<tr>
<td>Company Name:</td>
<td>Vibra Finish Co.</td>
</tr>
<tr>
<td></td>
<td>2220 N. Shasta Way</td>
</tr>
<tr>
<td></td>
<td>Simi Valley, CA 93065</td>
</tr>
<tr>
<td>Web site address:</td>
<td><a href="http://www.vibrafinish.com">www.vibrafinish.com</a></td>
</tr>
<tr>
<td>Emergency Contact:</td>
<td>Chemtrec</td>
</tr>
<tr>
<td>Phone Number:</td>
<td>+1 (800)635-0259</td>
</tr>
<tr>
<td></td>
<td>+1 (800)424-9300</td>
</tr>
</tbody>
</table>

## 2. HAZARDS IDENTIFICATION

**Acute Toxicity: Inhalation, Category 4**

**Acute Toxicity: Oral, Category 4**

**Acute Toxicity: Skin, Category 4**

**Skin Corrosion/Irritation, Category 2**

**Serious Eye Damage/Eye Irritation, Category 2A**

**Target Organ Systemic Toxicity (single exposure), Category 3**

**Target Organ Systemic Toxicity (repeated exposure), Category 2**

**GHS Signal Word**: Warning

**GHS Hazard Phrases**: H332 - Harmful if inhaled. H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H373 - May cause damage to skin through prolonged or repeated exposure.

**GHS Precaution Phrases**: P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P362+364 - Take off contaminated clothing and wash it before reuse.


**GHS Storage and Disposal Phrases**: P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard Rating System:

Potential Health Effects (Acute and Chronic):
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. When diluted with water, VF-100 is not anticipated to pose a health hazard. Exercise caution, however, when working with the concentrated product (as supplied). All chemicals, regardless of concentration, should be handled with care and in a manner that minimizes exposure.

Inhalation:
Avoid breathing vapors or mists. May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract. May cause central nervous system effects such as nausea and headache. May cause narcotic effects in high concentration. High concentrations may cause acute pulmonary edema.

Skin Contact:
May cause skin irritation. May be harmful if absorbed through the skin.

Eye Contact:
Causes eye irritation. May cause burning of eyes and flow of tears. Causes redness and pain.

Ingestion:
May be harmful if swallowed. May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethylene glycol monobutyl ether</td>
<td>&lt;6.0 %</td>
</tr>
<tr>
<td>7758-29-4</td>
<td>STPP</td>
<td>&lt;3.0 %</td>
</tr>
<tr>
<td>127087-87-0</td>
<td>Poly(oxy-1,2-ethanediyl).alpha-(4-nonylphenyl).omega.-hydroxy-,branched</td>
<td>&lt;4.0 %</td>
</tr>
<tr>
<td>9016-45-9</td>
<td>Poly(oxy-1,2-ethanediyl).alpha-(nonylphenyl).omega.-hydroxy-</td>
<td>&lt;4.0 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Emergency and First Aid Procedures:
Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately.

In Case of Inhalation:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get medical attention if irritation persists.

In Case of Skin Contact:
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Gently wash with plenty of soap and water. Wash contaminated clothing separately before reuse. Get medical aid if irritation develops and persists.

In Case of Eye Contact:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get medical attention if irritation persists.

In Case of Ingestion:
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Get immediate medical advice/attention.

Signs and Symptoms Of Exposure:
Exposure can cause: Nausea, headache, and vomiting.

Note to Physician:
Treat symptomatically and supportively. Show this safety data sheet to the doctor in
5. FIRE FIGHTING MEASURES

Flash Pt: 160 F (71.1 C)  
Method Used: Pensky-Marten Closed Cup

Explosive Limits:  
LEL: No data.  
UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers can build up pressure if exposed to heat (fire). Containers may explode in the heat of a fire. Use water spray to keep fire-exposed containers cool.

Flammable Properties and Hazards: High temperatures and fires may produce toxic carbon monoxide, carbon dioxide and oxides of phosphorus, nitrogen and sodium. Containers may explode in the heat of a fire. Use water spray to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Use proper personal protective equipment as indicated in Section 8.

Environmental Precautions: Do not let product enter storm drains, storm sewers, watersheds or water systems unless authorized.

Steps To Be Taken In Case Material Is Released Or Spilled: Provide ventilation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contain spill using an inert diking material. Transfer material into an approved container for possible recovery and reuse or for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep away from heat, sparks and flame. Keep away from sources of ignition. Keep away from oxidizing agents.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from sources of ignition. Keep away from heat, sparks and flame. Keep away from oxidizing agents. Protect containers against damage. Keep container closed when not in use.

Other Precautions: Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethylene glycol monobutyl ether</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>7758-29-4</td>
<td>STPP</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>127087-87-0</td>
<td>Poly(oxy-1,2-ethanediyl), alpha-(4-nonyl phenyl)-omega-hydroxy-branched</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>9016-45-9</td>
<td>Poly(oxy-1,2-ethanediyl), alpha-(nonyl phenyl)-omega-hydroxy-</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>
Respiratory Equipment: Avoid breathing vapors and mists. Avoid generating mists or sprays to significantly reduce risk of respiratory exposure. If ventilation is not sufficient to effectively prevent buildup of vapors or mists and the exposure limit is exceeded, use a NIOSH/MSHA approved respirator. Use a NIOSH/MSHA approved respirator, with a full-facepiece when concentrations are unknown.

Eye Protection: Wear chemical splash goggles and a full-face shield where there is potential for eye contact.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls: Use adequate mechanical or local exhaust ventilation to minimize exposure levels, particularly in areas where the air contacts open process equipment. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Facilities storing or utilizing this material should be equipped with an eyewash facility, and a safety shower is recommended.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [ X ] Liquid [ ] Solid


Melting Point: NA

Boiling Point: > 212 F (100 C)

Autoignition Pt: No data.

Flash Pt: 160 F (71.1 C) Method Used: Pensky-Marten Closed Cup

Explosive Limits: LEL: No data. UEL: No data.

Specific Gravity (Water = 1): 1.05

Density: NA

Vapor Pressure (vs. Air or mm Hg): NA

Vapor Density (vs. Air = 1): NA

Evaporation Rate: NA

Solubility in Water: Complete

Saturated Vapor Concentration: NA

Viscosity: NA

pH: 8.8 - 9.5

Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Reactivity: High temperatures and fires may produce toxic carbon monoxide, carbon dioxide and oxides of phosphorus, nitrogen and sodium.

Stability: Unstable [ ] Stable [ X ]

Conditions To Avoid - Instability:

Incompatibility - Materials To Avoid:

Hazardous Decomposition Or Byproducts:

High temperatures and fires may produce toxic carbon monoxide, carbon dioxide and oxides of phosphorus, nitrogen and sodium.
### 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:**
- Epidemiology: No information available.
- Teratogenicity: No information available.
- Reproductive Effects: No data available.
- Mutagenicity: No data available.
- Neurotoxicity: No information found.

**Other Studies:**
- CAS # 111-76-2:
  - Acute toxicity, LC50, Inhalation, Rat, 450.0 ppm, 4 H.
  - Acute toxicity, LD50, Oral, Rat, 470.0 mg/kg
  - Acute toxicity, LD50, Skin, Rabbit, 220.0 mg/kg

- Other Studies: CAS # 7758-29-4:
  - Acute toxicity, LD50, Oral, Rat, 3120.0 mg/kg

**Irritation or Corrosion:**
- Standard Draize Test, Eyes, Species: Rabbit, 100.0 mg, 24 H.

- Other Studies: CAS # 9016-45-9:
  - Acute toxicity, LD50, Oral, Rat, 3670.0 ul/kg

**Sensitization:**
- Skin sensitization testing with human volunteers produced negative results. A skin notation is not recommended by ACGIH, based on estimates from physiologically based pharmacokinetic models which indicate that, even in worst-case dermal-exposure scenarios, 2-butoxyethanol is not absorbed in amounts sufficient to cause red blood cell hemolysis in humans.

**Carcinogenicity/Other Information:**
- CAS# 111-76-2: ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans.
- NTP? No
- IARC Monographs? No
- OSHA Regulated? No

### 12. ECOLOGICAL INFORMATION

**General Ecological Information:**
- Physical: No information found.

**Results of PBT and vPvB assessment:**
- CAS # 111-76-2:
  - LC50, Water Flea(Daphnia magna), 1720 mg/l, 24 H, Intoxication
  - LC50, Common Shrimp, Sand Shrimp(Crangon crangon), 775000 ug/l, 96 H, Mortality
  - LC50, Amphipod (Chaetogammarus marinus), young organism(s), 1000 mg/l, 24 H, Mortality
  - LC50, Carp (Leuciscus idus ssp. melanotus), 1575 mg/l, 48 H, Mortality
  - Effective concentration to 0% of test organisms, Blue-Green Algae(Microcystis aeruginosa), 156000 ug/L, Population

- CAS # 7758-29-4:
  - LC50, Medaka, High-Eyes (Oryzias latipes), 590000 ug/l, 48 H, Mortality

- CAS # 9016-45-9:
Bioaccumulative Potential: An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.

Mobility in Soil: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

RCRA P-Series: None listed.
RCRA U-Series: None listed.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.
DOT Hazard Class: UN/NA Number:

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethylene glycol monobutyl ether</td>
<td>No</td>
<td>No</td>
<td>Yes-Cat. N230</td>
</tr>
<tr>
<td>7758-29-4</td>
<td>STPP</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>No</td>
</tr>
<tr>
<td>127087-87-0</td>
<td>Poly(oxy-1,2-ethanediyl),.alpha-(4-nonylphenyl)-.omega.-hydroxy-,branched</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>9016-45-9</td>
<td>Poly(oxy-1,2-ethanediyl),.alpha-(nonylphenyl)-.omega.-hydroxy-</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Other US EPA or State Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Other US EPA or State Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethylene glycol monobutyl ether</td>
<td>TSCA: Inventory; CA PROPI.65: No; CA TAC, Title 8: TAC, Title 8</td>
</tr>
<tr>
<td>7758-29-4</td>
<td>STPP</td>
<td>TSCA: Inventory; CA PROPI.65: No; CA TAC, Title 8: TAC, Title 8</td>
</tr>
<tr>
<td>127087-87-0</td>
<td>Poly(oxy-1,2-ethanediyl),.alpha-(4-nonylphenyl)-.omega.-hydroxy-,branched</td>
<td>TSCA: Inventory, 8A PAIR; CA PROPI.65: No; CA TAC, Title 8: No</td>
</tr>
<tr>
<td>9016-45-9</td>
<td>Poly(oxy-1,2-ethanediyl),.alpha-(nonylphenyl)-.omega.-hydroxy-</td>
<td>TSCA: Inventory, 8A PAIR; CA PROPI.65: No; CA TAC, Title 8: No</td>
</tr>
</tbody>
</table>
PROPOSITION 65 (Chemicals known to the state of California to cause cancer or reproductive toxicity): Trace (CAS #123-91-1) 1,4-dioxane, Trace (CAS #75-21-8) ethylene oxide

**16. OTHER INFORMATION**

*Revision Date:* 08/16/2013

*Additional Information About This Product:* No data available.

*Company Policy or Disclaimer:* Vibra Finish company cannot anticipate all conditions which this information and our products, or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether alone or in combination with other products.