1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: VF-77T
Product Name: VF-77T
Company Name: Vibra Finish Co.
2220 N. Shasta Way
Simi Valley, CA  93065
Web site address: www.vibrafinish.com
Emergency Contact: Chemtrec
Phone Number: +1  (800)635-0259

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 1

GHS Signal Word: Danger

GHS Hazard Phrases:

GHS Precaution Phrases:
P261 - Avoid breathing dust/fume/gas/mist/vapours/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 Response Phrases:
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P315 - Get immediate medical advice/attention.
P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315 - Get immediate medical advice/attention.
P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.

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

- Flammability: 2
- Instability: 0
- Health: 1
- Special Hazard: 0

NFPA Hazard Ratings

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-77T 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:

Material may be irritating to mucous membranes and upper respiratory tract. May cause headache, loss of appetite, nausea, fatigue, abdominal pain, darkened urine and jaundice. High concentrations may cause acute pulmonary edema. May cause narcotic effects in high concentration. May cause lung damage.

Skin Contact:

May cause skin irritation. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Eye Contact:

Contact may cause transient eye irritation. May cause burning of eyes and flow of tears. May cause chemical conjunctivitis and corneal damage.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause irritation of the mucous membranes in the mouth, throat, esophagus, and stomach. May cause severe and permanent damage to the digestive tract.

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>141-43-5</td>
<td>Monoethanolamine</td>
<td>&lt;2.5 %</td>
</tr>
<tr>
<td>127087-87-0</td>
<td>Poly(oxy-1,2-ethanediyl),alpha-(4-nonylphenyl),omega.-hydroxy,-branched</td>
<td>&lt;10 %</td>
</tr>
<tr>
<td>64-02-8</td>
<td>Ethylenediamine tetraacetic acid, tetrasodium salt</td>
<td>&lt;4.0 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Do NOT use mouth-to-mouth resuscitation. Get medical aid immediately.

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

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. Gastrointestinal disturbances. Dermatitis. Serious eye damage. Respiratory tract irritation and lung damage.

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 appropriate 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.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8. 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>PEL: 50 ppm</td>
<td>TLV: 20 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td>141-43-5</td>
<td>Monoethanolamine</td>
<td>PEL: 3 ppm</td>
<td>TLV: 3 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td>127087-87-0</td>
<td>Poly(oxy-1,2-ethanediyl),alpha-(4-non-ylphenyl)-omega-hydroxy,-branched</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>64-02-8</td>
<td>Ethylenediamine tetraacetic acid, tetrasodium salt</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>
Respiratory Equipment
(Specify Type):
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
(Ventilation etc.):
Use adequate general or local exhaust ventilation to minimize exposure levels. 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): 1.03
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: 10 - 11
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:
Excess heat, Incompatible materials, ignition sources.

Incompatibility - Materials To Avoid:
Strong acids, Strong bases, Strong oxidizing agents.

Avoid:

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

Byproducts:

Possibility of Hazardous Reactions:
Will occur [ ] Will not occur [ X ]
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 # 64-02-8:
  - Acute toxicity, LD50, Oral, Rat, 10.0 mg/kg
- Other Studies: CAS # 141-43-5:
  - Acute toxicity, LD50, Oral, Rat, 1720 mg/kg
  - Acute toxicity, TDLo, Oral, Species: Rat, 115 gm/kg 90D

Irritation or Corrosion:
- Standard Draize Test, Eyes, Species: Rabbit, 100.0 mg, 24 H.
  - Other Studies: CAS # 64-02-8:
    - Standard Draize Test, Eyes, Species: Rabbit, 100.00 mg, 24 H.
  - Other Studies: CAS # 141-43-5:
    - Standard Draize Test, Eyes, Species: Rabbit, 250 ug

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:
- NTP? No
- IARC Monographs? No
- OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:
- Physical: No information available.

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# 141-43-5:
  - LC50, Water Flea (Daphnia magna), 140.00 mg/l, 24 H, Intoxication
  - LC50, Bluegill (Lepomis macrochirus), 300 mg/l, 24 H, Mortality

- CAS# 64-02-8:
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.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: NOT REGULATED FOR DOMESTIC TRANSPORT.
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>141-43-5</td>
<td>Monoethanolamine</td>
<td>No</td>
<td>No</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>
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<td>No</td>
<td>No</td>
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</tr>
</tbody>
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<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 PROP.65: No; CA TAC, Title 8: TAC, Title 8</td>
</tr>
<tr>
<td>141-43-5</td>
<td>Monoethanolamine</td>
<td>TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: 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 PROP.65: No; CA TAC, Title 8: No</td>
</tr>
<tr>
<td>64-02-8</td>
<td>Ethylenediamine tetraacetic acid, tetrasodium salt</td>
<td>TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: No</td>
</tr>
</tbody>
</table>
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.