1 –IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

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

1.3 Product number VAEC-WS 020

1.4 24 Hr Emergency telephone: Infotrac 1-800-535-5053

2. Hazards Identification

The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

2.1 Classification of the substance or mixture:
F; R11 – Xi; R36 – R66 – R67
Xi - Irritant
F - Highly flammable liquid

2.2 Most important hazards:
Highly flammable
Irritating to eyes
Repeated exposure may cause skin dryness or cracking
Vapors may cause drowsiness and dizziness

Appearance: Water-white

Flammable Properties: HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

Emergency Overview:
Irritant
Eyes: May cause eye irritation.
Skin: May cause skin irritation and/or dermatitis.
Inhalation: May cause irritation of respiratory tract. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

3. Composition/Information on Ingredients

3.1 Substances:

<table>
<thead>
<tr>
<th>Hazard Components</th>
<th>CAS-No.</th>
<th>EINECS No.</th>
<th>Weight %</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>200-662-2</td>
<td>80 – 90</td>
<td>F; R11, Xi; R36, R66, R67</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>5 – 10</td>
<td>F; R11</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>141-78-6</td>
<td>205-500-4</td>
<td>5 - 10</td>
<td>F; R11, Xi; R36,R66,R67</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16

4. First Aid Measures

4.1 Description of first aid measures:

General advice:
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin Contact Wash off immediately with soap and plenty of water. Use a mild soap if available. Rinse immediately with plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation develops, get medical attention.

Inhalation Move to fresh air. If breathed in, move person into fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.

Ingestion If swallowed, DO NOT induce vomiting. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

5. Fire Fighting Measures

Flammable Properties HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

Suitable Extinguishing Media Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective Equipment and As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

Precautions for Firefighters (approved or equivalent) and full protective gear. Keep away from fire, sparks and heated
surfaces. Keep container tightly closed. Cool containers/tanks with water spray. Fire or intense heat may cause violent rupture of packages.

**Specific Hazards Arising** Thermal decomposition can lead to release of irritating gases and vapors. Burning from the Chemical produces noxious and toxic fumes.

### 6. Accidental Release Measures

**Personal Precautions** Remove all sources of ignition. Heat, flames and sparks. Ventilate the area. Avoid breathing dust or vapor. Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Methods for Cleaning Up** Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13). Do not use sparking tools.

**Environmental Precautions** Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

### 7. Handling and Storage

**Handling** Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove and wash contaminated clothing before re-use. Discard contaminated shoes. When using do not smoke. Take notice of labels and material safety data sheets for the working chemicals. Do not take internally. Harmful or fatal if swallowed.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep out of the reach of children. Keep away from heat and sources of ignition. Take notice of the directions of use on the label.

### 8. Exposure Controls/Personal Protection:

#### 8.1 Exposure limit values:

**Exposure Limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>ml/m³</th>
<th>mg/m³</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>1000</td>
<td>2400</td>
<td>TWA (8hr)</td>
<td>PEL</td>
</tr>
<tr>
<td></td>
<td>67-64-1</td>
<td>250</td>
<td>590</td>
<td>TWA (8hr)</td>
<td>REL</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>64-17-5</td>
<td>1000</td>
<td>1900</td>
<td>TWA (8hr)</td>
<td>PEL</td>
</tr>
<tr>
<td></td>
<td>64-17-5</td>
<td>1000</td>
<td>1900</td>
<td>TWA (8hr)</td>
<td>REL</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>141-78-6</td>
<td>400</td>
<td>1400</td>
<td>TWA (8hr)</td>
<td>PEL</td>
</tr>
<tr>
<td></td>
<td>141-78-6</td>
<td>400</td>
<td>1400</td>
<td>TWA (8hr)</td>
<td>REL</td>
</tr>
</tbody>
</table>

#### 8.2 Occupational exposure controls

**Engineering Measures** Use only with adequate ventilation. Use ventilation adequate to keep exposures below recommended exposure limits. See MSDS. In case of insufficient ventilation, wear suitable respiratory equipment.

**8.3 Personal Protective Equipment**

**Respiratory Protection** Use the indicated respiratory protection if the occupational exposure limit is exceeded and or/in case of product release (dust). Respirator with a vapor filter.

**Eye Protection** Ensure that eyewash stations and safety showers are close to the workstation location. Avoid contact with eyes. Safety glasses with side-shields. Goggles. Face-shield

**Skin Protection** Wear protective gloves/clothing. Solvent-resistant apron and boots

**Hand Protection** Nitrile rubber. Neoprene gloves.

#### 8.4 General Hygiene Considerations:

Handle in accordance with good industrial hygiene and safety practice. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before eating, drinking, or smoking. Remove and wash contaminated clothing before re-use. Regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.

**Environmental exposure controls** No information available

### 9. Physical and Chemical Properties

#### 9.1 Information on basic physical and chemical properties:

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Water-white</td>
</tr>
<tr>
<td>Odor:</td>
<td>characteristic</td>
</tr>
<tr>
<td>- Flash point:</td>
<td>- 20° C / - 4° F</td>
</tr>
<tr>
<td>- pH:</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**- Flammability limits in air:**

| Lower: | No information available |
upper:

- Boiling point/Boiling range: No information available
- Freezing point/range: No information available
- Evaporation rate: No information available
- Flammability (solid, gas): No information available
- Vapour pressure: No information available
- Odor Threshold: No information available
- Autoignition temperature: No information available
- Melting point/range: No information available
- Solubility: No information available
- Partition coefficient (n-octanol/water): No information available
- Vapour density: Heavier than air
- Method: Closed up
- Photochemically reactive: No
- Weight per gallon (lbs/gal): 6,629
- Specific gravity: 0.795

10 Stability and Reactivity
Chemical Stability Stable under normal conditions.
Conditions to Avoid Heat, flames and sparks.
Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO2). Carbon monoxide.
Possibility of Hazardous Reactions None under normal processing.

11. Toxicological Information

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>5800 mg/kg ( Rat )</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>7060 mg/kg ( Rat )</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>5620 mg/kg ( Rat )</td>
<td>18000 mg/kg ( Rabbit )</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 mL/kg ( Rabbit )</td>
<td></td>
</tr>
</tbody>
</table>

11.2 Chronic Toxicity:
| Sensitisation | No information available |
| Neurological Effects | No information available |
| Mutagenic Effects | No information available |
| Reproductive Effects | No information available |
| Developmental hazard | No information available |
| Teratogenicity | No information available |
| Chronic Effects | No information available |
| Target Organ Effects | No information available |

12 Ecological Information

Ecotoxicity
We have no quantitative data concerning the ecological effects of this product. Environmental fate information is derived from consideration of the properties of the ingredients. Should not be released into the environment.

<table>
<thead>
<tr>
<th>Component</th>
<th>Algae</th>
<th>Fish</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>n/a</td>
<td>LC50: 4.74 – 6.33 mL/L (Oncorhynchus mykiss) LC50: 6210 - 8120 mg/L (Pimephales promelas) LC50: 8300 mg/L (Lepomis macrochirus)</td>
<td>EC50: 10294 - 17704 mg/L (Daphnia magna) EC50: 12600 (Daphnia magna) EC50: 12600 - 12700 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>n/a</td>
<td>LC50: 12.0 – 16.0 mL/L (Oncorhynchus mykiss) LC50: 13400 - 15100 mg/L (Pimephales promelas) LC50: &gt;100 mg/L (Pimephales promelas)</td>
<td>LC50: 9268 - 14221 mg/L (Daphnia magna) EC50: 10800 mg/L (Daphnia magna) EC50: 2 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>EC50: =3300</td>
<td>LC50: 220 - 250 mg/L (Pimephales promelas) LC50: 352 - 500</td>
<td>EC50: =560 mg/L (Daphnia magna)</td>
</tr>
</tbody>
</table>
mg/L Desmodesmus subspicatus mg/L (Oncorhynchus mykiss) LC50: =484 mg/L (Oncorhynchus Mykiss magna)

Persistence and Degradability
Bioaccumulation
Mobility in Environmental Media

Component Log Pow
Acetone - 0,24
Ethyl alcohol - 0,32
Ethyl acetate 0,6

13 Disposal Considerations:
Waste Disposal Methods: Dispose of contents/container in accordance with local regulation.
Contaminated Packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

14 Transport Information
14.1 Transport in accordance with ADR/RID und GGVSEB/RSEB (cross boarder/Inland):
UN-Number: UN 1263
Proper Shipping name: Paint related material
Transport hazard class: 3
Packing group: II
ADR Label: 3
Limited quantity: 5L
Tunnel restriction code: (D/E)
Environmental hazards: n/a

14.2 Transport in accordance with IMDG/GGVSee:
UN-Number: UN 1263
Proper Shipping name: Paint related material
Transport hazard class: 3
Packing group: II
EmS-Number: F-E, S-E
Hazard label: 3
Marine pollutant: no

14.3 Transport according with ICAO-TI und IATA-DGR:
UN-Number: UN 1263
Proper Shipping name: Paint related material
Transport hazard class: 3
Packing group: II
Hazard label: 3
Passenger Aircraft: Permitted for transport
Cargo Aircraft: Permitted for transport

15 Regulatory Information
The preparation is classified as dangerous in accordance with Directive 1999/45/EC
Labelling:
Symbol(s): Xi – Irritant
F - Highly flammable
R -phrase(s):
R11 - Highly flammable
R36 - Irritating to eyes
R66 - Repeated exposure may cause skin dryness or cracking
R67 - Vapours may cause drowsiness and dizziness
S -phrase(s):
S2 - Keep out of the reach of children
S16 - Keep away from sources of ignition - No smoking
S33 - Take precautionary measures against static discharges
S 7/9 - Keep container tightly closed and in a well-ventilated place
International Inventories
Listed on TSCA.
REACH: Substances of Very High Concern (SVHC): Article 57 of Regulation (EC) No 1907/2006 Does NOT contain a listed substance

Text of R-phrases mentioned in Section 3
R11 - Highly flammable
R66 - Repeated exposure may cause skin dryness or cracking
R67 - Vapours may cause drowsiness and dizziness
R36 - Irritating to eyes

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