1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name
Blade & Bit

Other Means of Identification
Product Code
891

Recommended Use of the Chemical and Restrictions on Use
Recommended Use
Blade and Bit maintenance.
Uses Advised Against
For industrial and institutional use only.

Details of the Supplier of the Safety Data Sheet
Manufactured for Address
PMS Products, Inc.
76 Veterans Dr. #110
Holland, MI 49423

Emergency Telephone Number
Company Phone Number
800-962-1732
Emergency Telephone
INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
</tr>
</tbody>
</table>

Signal Word
WARNING

Hazard Statements
Causes skin irritation
Causes eye irritation

Appearance
Pale yellow liquid
Physical State
Liquid
Odor
Mild
Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation develops or persists, seek medical attention.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If irritation develops or persists, seek medical attention.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>112-34-5</td>
<td>0 - 15</td>
</tr>
<tr>
<td>Glycol Ether DPM</td>
<td>34590-94-8</td>
<td>0 - 15</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>0 - 5</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>1310-58-3</td>
<td>0 - 5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First Aid Measures

General Advice
Provide this SDS to medical personnel for treatment.

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention/advice.

Eye Contact
Flush material out immediately with large amounts of water for at least 15 minutes, holding eye lids apart to insure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. Get medical attention immediately.

Ingestion
Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Drink 1-2 glasses of water. If vomiting occurs spontaneously, keep airway clear. Get medical attention immediately.

Skin Contact
Immediately remove contaminated clothing and flush affected areas with plenty of water for at least 15 minutes. Wash contaminated clothing before reuse. If irritation develops or persists, seek medical attention.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms
If in eyes may cause redness and burning. Prolonged skin contact may cause redness and dryness.
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Carbon dioxide, dry chemical, water fog, foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical
None known.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as required.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth).

Methods for Cleaning Up Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Wear appropriate personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Avoid contact with skin, eyes or clothing.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Storage temperature should be between 50°F - 120°F. Keep locked up and out of reach of children.


8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>1310-58-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>STEL: 400 ppm</td>
<td>TWA: 200 ppm</td>
<td></td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appropriate Engineering Controls

Engineering Controls Good general room ventilation should be adequate under normal conditions.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear approved safety goggles.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection No special equipment needed.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Pale yellow liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>11.5 - 12.5</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>1</td>
<td>(butyl acetate = 1)</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity Not reactive under normal conditions.

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.
Conditions to Avoid
Excessive heat or cold. Contamination of any kind.

Incompatible Materials

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation
May cause irritation to the mucous membranes and upper respiratory tract.

Eye Contact
Causes serious eye damage.

Skin Contact
Causes serious skin irritation.

Ingestion
Causes severe gastrointestinal irritation.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>2410 mg/kg (Mouse)</td>
<td>2784 mg/kg (Rabbit)</td>
<td>&gt;2.1 mg/l (Rat) 4 h</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>365 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>5050 mg/kg (Rat)</td>
<td>12800 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on Physical, Chemical and Toxicological Effects

Symptoms
If in eyes may cause redness and burning. Prolonged skin contact may cause redness and dryness. Do not taste or swallow.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity
No components of this product have been identified as carcinogens or potential carcinogens by ACGIH, IARC, NTP or OSHA.

Numerical Measures of Toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>EC50: Selenastrum 61 mg/l 96 h</td>
<td>LC50: Fish 9640 mg/l 96 h</td>
<td>EC50: Crustacean 1400 mg/l 48 h</td>
<td></td>
</tr>
<tr>
<td>Potassium Hydroxide 1310-58-3</td>
<td>EC50: Daphnia Magna 60 mg/l 48 h</td>
<td>LC50: Fathead Minnow 179 mg/l 96 h</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and Degradability
Not determined
Bioaccumulation
Not determined

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Do not reuse container. Triple rinse empty container with water. Plastic containers may be offered for recycling.

14. TRANSPORT INFORMATION

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT – Ground Transportation
Not regulated

IATA
UN1760, Corrosive liquid n.o.s. (potassium hydroxide), 8, PGIII

IMDG
UN1760, Corrosive liquid n.o.s. (potassium hydroxide), 8, PGIII

15. REGULATORY INFORMATION

International Inventories

TSCA
Listed

DSL
Listed

NDSL
Listed

Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>&lt;5</td>
<td>1.0</td>
</tr>
</tbody>
</table>
### CERCLA

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide 1310-58-3</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

#### US State Regulations

### U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether 112-34-5</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Potassium hydroxide 1310-58-3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**