MATERIAL SAFETY DATA SHEET
JD-2000

1. EMERGENCY PHONE NUMBER (United States)
   (864) 277-1620

2. COMPOSITION/INFORMATION ON INGREDIENTS
   Proprietary Formulation

3. HAZARDS IDENTIFICATION
   General:
   Limited toxicity data are available on this specific product.
   LC50 data is available upon request.
   Emergency Overview:
   Appearance: Yellow liquid.
   Routes of exposure: Eye contact; Skin contact; Inhalation
   Symptoms of Overexposure (Acute & Chronic):
   Eye Contact:
   May cause moderate irritation with corneal injury.
   Skin Contact:
   Prolonged or repeated exposure may cause slight skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.
   Inhalation:
   Single exposure to vapors is not likely to be hazardous.
   Ingestion:
   Single dose oral toxicity is considered to be extremely low.
   Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

4. FIRST AID MEASURES
   Eyes:
   Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.
   Skin:
   Wash off of the skin with plenty of soap and water. If redness, itching, or burning sensation develops, get medical attention.
   Ingestion:
   Seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
   Inhalation:
   Remove person to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.
   Note to Physician:
   No specific antidote. Supportive care. Treatment based on judgement of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES
   Flammable Properties:
   Flash Point: 212º F, 100º C
   Method Used: SW1010
   Autoignition temp.: No Data
   Flammable Limits (LEL/UEL): No Data
   Hazardous Combustion Products:
   During a fire, smoke may contain the original material in addition to
unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to: carbon monoxide, carbon dioxide.

Other Flammability Information:
Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. May spread fire.

Extinguishing Media:
Water, fog or fine spray, carbon dioxide, dry chemical, foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Do not use direct water stream.

Special Fire Fighting Protective Equipment:
Self-contained breathing apparatus with full facepiece and protective clothing.

Extinguishing Instructions:
Keep people away. Isolate fire area and deny unnecessary entry. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire.

6. ACCIDENTAL RELEASE MEASURES

Protect People:
Isolate area

Cleanup:
Clean up with absorbent material such as dirt or sand. Shovel into chemical waste container. Wash residue from spill area with water containing detergent and flush to a sewer serviced by a permitted wastewater treatment facility.

7. HANDLING AND STORAGE

Storage Requirements:
-30°F to 120°F in original closed container.

Precautions for Storage and Handling:
Prevent skin and eye contact.
Normal chemical handling and storage.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION

Exposure Limits:
Minimize exposure in accordance with good hygiene practice.

Engineering Controls:
Use ventilation adequate to maintain safe levels.

Eye Protection:
Chemical tight goggles.

Protective Clothing:
Impervious gloves such as rubber, neoprene or vinyl gloves.

Respiratory Protection:
Not normally needed if controls are adequate. If respiratory protection is required for certain operations, use an approved air purifying respirator.

Other Protective Equipment:
Eyewash station in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow liquid.
Odor: Slight odor.
Boiling Point: >200°F, 93°C
Vapor Pressure: No Data
Vapor Density: No Data
Solubility: Dispersible in fresh an salt water. Miscible in solvents.
P (Standard Units), s.u.: 7.54
Specific Gravity, 60/60: 0.99
% Volatile by Volume: No Data
Viscosity, cSt: 65.2
Pour Point: -36°F

10. STABILITY AND REACTIVITY

Stability:
Stable under normal storage conditions.

Incompatibility:
Oxidizing agents

Conditions to avoid:
Avoid static discharge. Flammable vapors can be released at elevated temperatures.

Hazardous Decomposition Products:
Combustion products: Carbon dioxide, carbon monoxide
11. TOXICOLOGICAL INFORMATION

Eye Contact:
Minimally irritating.

Skin Contact:
Slightly irritating from prolonged contact.

Acute Oral Toxicity:
No Data

Carcinogenicity:
No Data

Reproductive Toxicity/Teratogenicity:
No Data

Mutagenicity:
No Data

Toxicologically Synergistic Products:
None known

12. ECOLOGICAL INFORMATION

Environmental Fate:
Movement and Partitioning: No Data.
Degradation and Persistence: No Data.

Ecotoxicity:
LC50 for Menidia Beryllina is 407ppm/96hr.
LC50 for Mysidopsis Bahia is 90.5ppm/48hr.

13. DISPOSAL CONSIDERATIONS

Disposal Method:
Do not dump into any sewers, on the ground, or into any body of water.
All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. GlobeMark Resources has no control over the management practices or parties using this product. The information presented here pertains only to the product as shipped in its intended condition as described in the MSDS. For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: recycler, recclaimer, incinerator or other thermal destruction device.

14. TRANSPORT INFORMATION

Department of Transportation (D.O.T.):
This product is not regulated by D.O.T. when shipped domestically by land.

Canadian TDG Information:
For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or a GlobeMark Resources Representative.

15. REGULATORY INFORMATION (Not meant to be all-inclusive-selected regulations represented.)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

CANADIAN REGULATIONS:

WHMIS INFORMATION:
The Canadian Workplace Hazardous Material Information System (WHMIS) Classification for an ingredients in this product is:
D2B - Eye or Skin Irritant
Refer to elsewhere in the MSDS for specific warnings and safe handling information. Refer to employer's workplace education program.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Ratings:
Health 1
Flammability 1
Reactivity 0
# 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product name:</th>
<th>JD 2000</th>
</tr>
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<tbody>
<tr>
<td>CAS Number:</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Emergency Contact #:</td>
<td>864-277-1620</td>
</tr>
<tr>
<td>Date of Issue:</td>
<td>05/03/2010</td>
</tr>
<tr>
<td>Last Revision:</td>
<td>05/12/2010</td>
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</table>

# 2. Composition / Information on Components

**Chemical Name:**
Contents of chemical name and hazardous components are a trade secret as allowed by 29 CFR 1910.1200 (i) 1.

# 3. Hazards Identification

**Hazard Classification:**
INERT

**Hazardous Ingredients (ingredient|value):**
Proprietary (NOT ESTABLISHED)

**Carcinogenicity IARC:**
Unknown

**Carcinogenicity NTP:**
Unknown

**Carcinogenicity OSHA:**
Unknown

**Carcinogenicity ACGIH:**
Unknown

# 4. First Aid Measures

**Routes of Exposure and Symptoms:**
0 Ingestion: Overexposure may cause gastrointestinal irritation, diarrhea, nausea and vomiting.
0 Eyes: Overexposure causes excessive watering, redness and stinging.
0 Skin: Overexposure may cause itching and redness similar to a rash.

**First Aid:**
- Ingestion: Contact physician or poison control center. If victim is conscious and able to swallow, quickly give milk or water to dilute. Do not give sodium bicarbonate, vinegar, or fruit juices. Never give anything by mouth if victim is unconscious or having convulsions. Induce vomiting only upon advice of a physician.
- Eyes: Flush immediately with copious amounts of water. Continue flushing for at least 15 minutes. Seek medical attention.
- Skin: Wash exposed areas with soap and water. If itching and redness persist, seek medical attention.

# 5. Fire Fighting Measures

**Flash point, F, COC:**
201

**Flammable limits:**
Not Established

**Auto ignition temperature:**
Not Established

**Extinguishing media:**
Use water spray, dry chemical, foam or carbon dioxide.

**Special Procedures:**
Use water spray to cool drums exposed to fire

**Unusual Fire and Explosion Hazards:**
Firefighters should use self-contained breathing apparatus to avoid exposure to smoke and vapor

# 6. Accidental Release Measures

**Spill:**
Contain material by diking the area around the spill. If the product is in a solid form, shovel directly into recovery drums. If the product is a liquid, it should be picked up using a suitable absorbent material, then shoveled into recovery drums.
# Handling and Storage

**Requirements:**
No special requirements

# Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Respiratory Protection</th>
<th>Ventilation</th>
<th>Protective Gloves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not required</td>
<td>No special requirements</td>
<td>Chemical resistant rubber gloves</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Eye Protection</th>
<th>Other Equipment</th>
<th>Work / Hygienic Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical goggles</td>
<td>Eye wash and safety shower in the work area.</td>
<td>Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling</td>
</tr>
</tbody>
</table>

# Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Vapor Pressure</th>
<th>Vapor Density</th>
<th>Solubility in water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>DISPERSEBLE</td>
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</table>

<table>
<thead>
<tr>
<th>Specific Gravity</th>
<th>Melting Point, F</th>
<th>Evaporation Rate</th>
<th>% Activity</th>
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</thead>
<tbody>
<tr>
<td>.9089</td>
<td>NA</td>
<td>Not determined</td>
<td>98 MAX</td>
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</table>

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>YELLOW TO AMBER LIQUID</td>
<td>SLIGHT SORBITOL ESTER</td>
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</tbody>
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# Stability and Reactivity

**Stability:**
Product is stable

**Incompatibility:**
Avoid contact with strong Oxidizing agents

**Hazardous Polymerization:**
Will not occur

# Toxicological Information

**Oral LD50:**
Not determined

**Dermal LD50:**
Not determined

**Inhalation LC50:**
Not determined

**Skin:**
Not determined

**Eye:**
Not determined

**Chronic Toxicity / Carcinogenicity:**
Not determined

**Other Toxicological Information:**
Not determined

# Ecological Information

<table>
<thead>
<tr>
<th>Ecotoxicological Information</th>
<th>Bioaccumulation</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
13. Disposal Consideration

Waste Disposal:
Consult local, state and federal regulations before disposing of this material.

Spill:
If material is released into the environment, the user should determine whether the spill should be reported to the appropriate state and federal authorities.

Shipping Description:
NMFC 68580 SUB 3 CLEANING COMPOUND NOI LIQUID
NMFC 68581 SUB 3 CLEANING COMPOUND NOI
OTHER THAN LIQUID
NON-DOT REGULATED MATERIAL
EYE AND SKIN IRRITANT

14. Transport Information

15. Regulatory Information

TSCA Registered:
All components of this product are registered in the TSCA Inventory.

SARA Title III Section 313:
This product does not contain material regulated under SARA Title III Section 313

16. Other Information

HMIS Health: 1
HMIS Flammability: 1
HMIS Reactivity: 0
HMIS Personal Protection: B

Disclaimer:
This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate.