Section I - Company Information

Manufacturers Name: Omni Distribution, Inc. Explosive Products Division
Address: PO Box 171154
City, State, and Zip: Memphis, TN 38117
Contact Name: D. Nixon

Emergency Phone: Chem Tel: 800-255-3924
Other Info Call: 800-277-6664
Prepared Date: 14OCT2002

Section II - Hazardous Material(s) Identification

Hazardous Component(s) / Chemical & Common Name(s): Nitromethane
Common Name: Nitromethane / Synonyms: Nitrocarbinol, NM
Chemical Family: Aliphatic Hydrocarbons
CAS No.: 75-25-5
Chemical Formula: CH₃NO₂
Percent Present: 99.9
DOT Hazard Class: Flammable Liquid

Section III - Physical & Chemical Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>214 degrees F / 101 degrees Celsius</td>
</tr>
<tr>
<td>Vapor Density (Air-1)</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Melting Point</td>
<td>-20 degrees F / -29 degrees Celsius</td>
</tr>
<tr>
<td>Percent Volatiles (Wt.%)</td>
<td>100</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>36.66 mm Hg @ 25 degrees Celsius</td>
</tr>
<tr>
<td>Specific Gravity (H₂O=1)</td>
<td>1.14</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>11.1% wt. @ 25 degrees Celsius</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>1.4 (BuAc = 1)</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Clear, light green liquid with mild fruity odor</td>
</tr>
<tr>
<td>pH of 0.01 M aqueous solution</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Section IV - Fire & Explosion Hazard Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Method Used: Closed Cup</td>
</tr>
<tr>
<td>Flammable Limits (Vol %)</td>
<td>LEL 7.3%</td>
</tr>
<tr>
<td>UEL unknown</td>
<td></td>
</tr>
<tr>
<td>Auto Ignition Temp</td>
<td>785F / 418C</td>
</tr>
<tr>
<td>Extinguisher Media</td>
<td>Foam, CO₂, &amp; Heylon. Water may be ineffective in extinguishing fire.</td>
</tr>
<tr>
<td>Fire &amp; Explosion Hazards</td>
<td>Vapor is heavier than air - may travel to ignition source and flashback. Decomposes explosively at critical temp of 599 F and critical pressure of 915 psig.</td>
</tr>
<tr>
<td>Fire Fighting Procedures</td>
<td>Wear self contained breathing apparatus. Fight fire from an explosion-resistant distance. Cool boxes with water spray and continue to cool after fire is extinguished. Stay upwind and out of low areas. If tank or truck is involved in a fire isolate for 1/2 mile in all directions. Dike area to contain fire. Control water for later disposal.</td>
</tr>
</tbody>
</table>
**HELIX Liquid**

**Material Safety Data Sheet**

### Section V - Reactivity Data / Physical Hazards

**Stability:** Stable at normal temps  
**Conditions to avoid:** Unstable at elevated temps and pressures. Rapid heating to high temp may cause explosion. Mixing with other materials may increase instability. May be detonated under very strong confinement by powerful explosives.

**Materials to avoid:** Incompatible with amines, strong acids, alkalies (lie, caustic), strong oxidizers, metal oxides, hydrocarbons, and other combustible materials. Lead, copper and their alloys.

**Hazardous Decomposition Products** Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, Carbon Oxidase

**Hazardous Polymerization** Will not occur

### Section VI - Health Hazard Data

- [ ] Acute Hazard  
- [x] Chronic Hazard  
- [x] Irritant  
- [ ] Corrosive  
- [ ] Oxidizer  
- [ ] Lachrymator  
- [ ] Known Carcinogen  
- [ ] Reproductive

**Toxicity:** Mildly irritating to eyes. Prolonged / repeated skin contact may cause skin irritation. High air concentrations may cause eye and respiratory irritation. Oral LD50 for rats is 1210 mg/kg + 322 mg/kg. Acute/Chronic exposure has caused liver damage and some kidney effects in animal studies. Weak narcotic. Strong odor >100ppm and irritating at 200 ppm.

**Emergency & First Aid Procedures** Mildly irritating to eyes. Prolonged / repeated skin contact may cause skin irritation. High air concentrations may cause eye and respiratory irritation. Oral LD50 for rats is 1210 mg/kg + 322 mg/kg. Acute/Chronic exposure has caused liver damage and some kidney effects in animal studies. Weak narcotic. Strong odor >100ppm and irritating at 200 ppm.

**Routes of Entry**

1. **Inhalation** Inhalation: Yes. Irritation. Possible liver or kidney damage. Remove from contaminated atmosphere. Call physician if necessary.
2. **Eyes** Eyes: ND. Irritation, Teary, Stingy, Redness. Flush with H2O for 15 minutes. Contact physician immediately.
3. **Skin** Skin: No known skin absorption. Irritation. No known illness from skin contact. Flush with H2O, contact physician if needed.
4. **Ingestion** Ingestion: Yes. Toxic. Drink H2O. Induce vomiting if conscious. Do not induce if unconscious. Seek medical aid immediately.

### Section VII - Special Protection Info

**Respiratory Protection** Use pressure type full face supplied air or self contained breathing apparatus. Do not use cartridge type respirators.

**Ventilation** If necessary to control exposure, local explosion proof exhaust ventilation is recommended. Dilution ventilation is NOT recommended as a sole control mechanism.

**Protective Gloves:** Neoprene, natural rubber, polyethylene or polyvinyl chloride gloves  
**Eye Protection** Goggles, Safety Glasses.

**Other Protective Clothing or Equipment** Impervious clothing if possibility of body contact exists

**Work/Hygienic Practices** Check for vapor accumulation before entering a confined space. Wash thoroughly after handling. Wash contaminated clothing before reuse. Launder separately from family clothes. Check gloves for leaks before use. Transfer equipment must be around.
Storage & Handling
Store in cool, dry, well ventilated structure and according to local, state and federal laws. Do not store with explosives.

Other Precautions
Use common sense when handling.

Waste Disposal Methods
U.S. - Dispose of pure product as a waste according to 40CFR261 by classifying & labeling as follows: EPA Haz Code: Ignitable. HazWaste No. D001
Canada - Dispose of waste in accordance with local, provincial and national regulations.

Material Spills/Release
Eliminate Ignition sources. Evacuate nonessential personnel. Ventilate area. Use protective equipment as stated above. Absorb spilled liquids using an inert material.

Section IX - Miscellaneous
Exposure Limits:
ACGIH TLV = 100 ppm TWA
OSHA PEL = 100 ppm TWA
NIOSH IDLH = 1000 ppm - Immediately dangerous to life or health.

HMIS Rating: Health = 2, Flammability = 3, Reactivity = 3, Personal Protective Equipment = H (do not use air purifying respirator)

U.S. TSCA Listing: All components are listed in the U.S. EPA TSCA listing.

SARA Title III, 40CFR372 Reportable Quantities: None
Canadian Shipping Info: Nitromethane, 3.3 PIN 1261, II
Canadian Hazard Class and Division: Class B, Division 2. Class D. Division 1B, Class F

Not a hazardous substance under 40CFR116, toxic pollutant (40CFR129) or “priority pollutant” pursuant to the Federal Water Pollution Control Act sections 311
Minimally photochemically reactive.