1. **Product Identification**
   - **Product Code:** JAC4770

2. **Composition/Information on Ingredients**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>%</th>
<th>EINECS-No</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid</td>
<td>17</td>
<td>200-580-7</td>
<td>64-19-7</td>
</tr>
</tbody>
</table>

3. **Physical & Chemical Characteristics**
   - **Boiling Point:** N/A
   - **Vapor Pressure:** N/A
   - **Vapor Density:** N/A
   - **Solubility in Water:** Miscible (20 C)
   - **Appearance & Odor:** Blue liquid with a strong vinegar smell
   - **Density:** 1000-1200 Kg/m3
   - **Bulk Density:** 100-1200 Kg/m3
   - **Solubility in other solvents:** Miscible with Acetic Acid
   - **pH value:** 2+/ without dilution
   - **Octanol/water partition coefficient (log P ow):** <0.1
   - **Specific Gravity:** N/A
   - **Melting Point:** N/A
   - **Evaporation Rate:** N/A

4. **Fire & Explosion Data**
   - **Flash Point:** >205 F (PMCC)
   - **Auto Ignition:** N/A
   - **Extinguishing Media:** Water, dry chemical, CO2, foam
   - **Special Fire Procedures:** Firefighters should be equipped with protective clothing & self-contained breathing apparatus to protect against potentially toxic & irritating fumes.
   - **Unusual Hazards:** In case of fire or explosion, keep unnecessary people away. Isolate hazard area & any entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. For small fires, use dry chemical, CO2 or water spray. For large fires, use dry chemical, CO2, alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk. Dike fire control water for later disposal; do not scatter the material. Fire involving tanks or car/trailer loads; fight fire from maximum distance or use unmanned hose holders or monitors nozzles. Do not get water inside containers.

5. **Reactivity Data**
   - **Stable:** Stable
   - **Conditions to Avoid:** None known
   - **Incompatibility:** None Known
   - **Hazardous Decomposition:** Like any other organic product combustion will produce Carbon monoxide. Oxides of Nitrogen and Sulfur may also be produced.
   - **Hazardous Polymerization:** N/A
6. Health Effects Data
   Animal Toxicity Oral-LD50 (Indigestion): No data
   Fish, LC50:
   LC 0% (48 h) = 1ppm
   LC 50% (48 h) = 1.4ppm
   LC50% (96 h) = 1.64ppm
   LC 100% (48 h) 1.8ppm
   Daphnia Toxicity: IC 350 48 h =1.4 ppm
   Biodegradability: = 97.5% 28 days
   Log Pow: <0.1
   Further Ecological Information: COD-Value 2.04 gO2/g
   BOD5-Value: <0.1 gO2/g
   WGK Class (Germany): 2. Toxic to Aquatic Organisms
   Eye Effects: Rabbit: Eyes: Severe irritant
   Skin Effects: Rabbit: Skin: Does not produce skin irritant on rabbit
   Human Effects of Overexposure: Contact with eyes and skin may result in irritation.
   Ingestion may result in gastric disturbances. Inhalation may cause respiratory irritation.
   Carcinogenic: Material is a listed Carcinogen

7. Employee Protection Recommendations:
   Eye Protection: Employees should wear protective eye goggles
   Skin Protection: This material may be absorbed via the dermal route if prolonged or
   widespread skin contact occurs. Employees should avoid skin contact by wearing
   protective clothing. Long sleeve shirts, pants, rubber gloves and boots are recommended
   when the potential for dermal contact is significant. Employees should wash their hands
   and face before eating and drinking and shower thoroughly before leaving work
   Respiratory Protection: NIOSH approved dust respirator
   Ventilation: Use local ventilation if dusting is a problem
   Other: Emergency showers and eye wash stations should be available.

8. Emergency & First Aid Procedures
   Inhalation: if inhaled, remove to fresh air. If not breathing, give artificial respiration,
   preferably mouth to mouth. If breathing is difficult, give oxygen. Call a physician.
   Eyes: Wash immediately with large amounts of water, occasionally lifting the upper and
   lower lids until no evidence of product remain. Get medical attention. Do not wear
   contact lenses while handling.
   Skin: Wash immediately with soap and plenty of water. If a temporary skin reaction
   occurs, it should be treated as allergic contact dermatitis. Launder contaminated clothing
   before reuse.
   Ingestion: If swallowed, do not induce vomiting. Qualified medical personnel should
   remove the product by gastric leakage and catharsis. Get medical attention.

9. Special Precautions & Spill/Leak Procedures
   Handling & Storage: Store in a dry place, away from excessive heat, in original or
   similar waterproof container. Reseal container immediately after use. Avoid unnecessary
   contact. Call emergency number or shipping paper. Isolate spill or leak area immediately
   for at least 25 to 50 meters (80 to 60 feet) in all directions. Keep unauthorized persons
   away. Stay upwind. Keep out of low areas. Ventilate enclosed areas.
   Steps if Spilled: Do not touch or walk through the spilled material: stop leak if you can
   do it without risk. Eliminate all ignition sources (no smoking, flares, sparks or flames in
   immediate area). Do not touch damaged container or spilled material unless wearing
appropriate protective clothing. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry material and transfer to containers. Do not get water inside containers.

**Waste Disposal:** Waste disposal should be in accordance with existing federal, state and local environmental regulations. Material is a marine pollutant.

### 10. Special Protection Information
- **Respiratory Protection:** NIOSH approved dust respirator
- **Ventilation:** Use local ventilation if dusting is a problem.
- **Skin Protection:** This material may be absorbed via the dermal route if prolonged or widespread skin contact occurs. Employees should avoid skin contact by wearing protective clothing. Long sleeve shirts, pants, rubber gloves and boots are recommended. Additional protection, such as impervious suits, are recommended when the potential for dermal contact is significant. Employees should wash their hands and face before eating and drinking and shower thoroughly before leaving work.
- **Eye Protection:** Employees should wear protective eye goggles.
- **Other Protection:** Emergency showers and eyewash stations should be available.
- **Work/Hygienic Practices:** N/A

### 11. Shipping Data
- **Proper Shipping Name:** Dyes, Liquid, Corrosive, N.O.S. (Contains acetic acid)
- **D.O.T Hazard Classification:** UN2801
- **Frt. Class Package:** 8
- **Packing Group:** PGII

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