**MATERIAL SAFETY DATA SHEET**

**SECTION I**

**MANUFACTURER'S NAME**
Fel-Pro Incorporated

**ADDRESS (Name, Street, City, State, and ZIP Code)**
7450 N. McCormick Blvd., Skokie, Illinois 60076

**CHEMICAL NAME AND SYMPTOMS**
Ethyl-2-Cyanoacrylate

**TECHNICAL NAME AND SYMBOL**
Pro Grip 4000

**FORMULA**
C₆H₅COOC(CN)=CH₂

**SECTION II—HAZARDOUS INGREDIENTS**

<table>
<thead>
<tr>
<th>PIGMENTS</th>
<th>PRESERVATIVES AND SOLVENTS</th>
<th>%</th>
<th>TLV (L/min)</th>
<th>ALLOYS AND METALLIC COATINGS</th>
<th>%</th>
<th>TLV (L/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE METAL</td>
<td>ALLOYS</td>
<td>METALLIC COATINGS</td>
<td>FILLER METAL PLUS COATING OR CORE FLUX</td>
<td>OTHERS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HAZARDOUS MIXTURES OF THESE LIQUIDS, SOLIDS, OR GASES**
Ethyl-2-Cyanoacrylate


**SECTION III—PHYSICAL DATA**

| BOILING POINT (°F.) | 220°F | SPECIFIC GRAVITY (H₂O = 1) | 1.05 |
| VAPOR PRESSURE (mmHg.) | 10.77°C | < 2 mmHg | ~ 90% |
| VAPOR DENSITY AIR : 1 | 3.8 | EVAPORATION RATE | 1 | Not Determined |
| SOLUBILITY IN WATER | Negligible | WATER INITIATES RAPID POLYMERIZATION |
| APPEARANCE AND ODOR | Clear to slightly hazy liquid - pungent unpleasant odor, vapors are mildly lacrimatory |

**SECTION IV—FIRE AND EXPLOSION HAZARD DATA**

| LOWER FLAMMABLE LIMIT | Not known |
| UPPER FLAMMABLE LIMIT | Not known |
| LOWER EXPLOSION LIMIT | Not known |
| UPPER EXPLOSION LIMIT | Not known |

**EXTINGUISHING MEDIA**
Dry chemical or CO₂ recommended. Water spray may result in hazardous polymerization.

**SPECIFIC FIRE FIGHTING PROCEDURES**
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin or eyes.

**HAZARD TO AIR AND EXPLOSION HAZARDS**
Pyrolysis may result in formation of toxic fumes. Adhesive in absorbent material, such as rags used to wipe up spills, may undergo rapid polymerization and cause an increase in temperature that could conceivably result in autoignition.
## SECTION V—HEALTH HAZARD DATA

**Threshold Limit Value**
None established.

**Effects of Overexposure**
Liquid causes skin to bond very rapidly to itself or almost anything else which it contacts. Liquid in eyes will cause irritation and can bond eyelids very quickly. Exposure to vapor may cause irritation of mucous membranes.

**Emergency and First Aid Procedures**
Skin contact—Flush immediately with water to cause polymerization of the adhesive and reduce its affinity for skin. Repeated soaking in warm water may aid in loosening bonded skin. In eyes—Flush immediately and thoroughly with water holding eyelids apart to prevent bonding. Do not force eyelids apart. Consult physician immediately. For inhalation—Remove to fresh air, consult physician.

## SECTION VI—REACTIVITY DATA

<table>
<thead>
<tr>
<th>STABILITY</th>
<th>UNSTABLE</th>
<th>CONDITIONS TO AVOID</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not applicable, but see &quot;hazardous polymerization condition to avoid&quot; below.</td>
</tr>
</tbody>
</table>

### Incompatibility (materials to avoid)
Strong oxidizing materials can cause a vigorous reaction.

### Hazardous Decomposition Products
Combustion may result in CO, CO₂, and NOₓ, and possible formation of toxic fumes.

<table>
<thead>
<tr>
<th>HAZARDOUS POLYMERIZATION</th>
<th>MAY OCCUR</th>
<th>CONDITIONS TO AVOID</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>Contamination of adhesive with acidic or basic materials, peroxides, or water can result in rapid polymerization with uncontrollable rise in temperatures.</td>
</tr>
</tbody>
</table>

## SECTION VII—SPILL OR LEAK PROCEDURES

**Tips to be Taken in Case Material is Released or Spilled**
Eliminate ignition sources, use cloths to absorb adhesive, Incinerate immediately or store in a closed metal container; clothes containing adhesive may undergo auto-ignition.

Protect eyes, skin, and clothing from contact with adhesive.

**Waste Disposal Method**
Controlled incineration or landfill in accordance with Federal, State and Local Regulations.

## SECTION VIII—SPECIAL PROTECTION INFORMATION

**Respirator Protection**
A NIOSH-MESA approved respirator for organic vapor should be worn if ventilation is inadequate.

<table>
<thead>
<tr>
<th>VENTILATION</th>
<th>LOCAL EXHAUST</th>
<th>MECHANICAL EXHAUST</th>
<th>SPECIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>Satisfactory - under most conditions</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Applying Gloves**
Polyethylene gloves recommended. Sufficient to prevent contact.

**Other Protective Equipment**
Coveralls or apron may be used to reduce risk of contact with adhesive.

## SECTION IX—SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling and Storing**
Store away from heat, open flames, or ignition sources. Avoid contact with eyes, skin, and clothing.

Avoid breathing vapor. Use with ventilation adequate to maintain vapor concentration below irritant levels.

Material is classified as combustible liquid. Keep away from heat and open flame. If skin bonding occurs, attempts to force separation may result in local tissue damage. Repeated soaking in warm water may aid in loosening the bond.

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