MATERIAL SAFETY DATA SHEET

DIVISION: INDUSTRIAL TAPE AND SPECIALTIES DIVISION

TRADE NAME:
Super 77 Spray Adhesive


ISSUED: JULY 1, 1993
SUPERSEDES: AUGUST 20, 1992
DOCUMENT: 10-5970-8

1. INGREDIENT C.A.S. NO. PERCENT

<table>
<thead>
<tr>
<th>NON-VOLATILE COMPONENTS - N.J.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TRADE SECRET (T.S.) REGISTRY NO.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0449600-5452P ++ TradeSecret</td>
<td>1.0</td>
<td>30.0</td>
</tr>
<tr>
<td>HEXANE (OTHER ISOMERS) None</td>
<td>10.0</td>
<td>20.0</td>
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<tr>
<td>CYCLOHEXANE 110-82-7</td>
<td>10.0</td>
<td>20.0</td>
</tr>
<tr>
<td>N-HEXANE 110-54-3</td>
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</tr>
<tr>
<td>ISOBUTANE 75-28-5</td>
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<td>20.0</td>
</tr>
<tr>
<td>DIMETHYL ETHER 74-98-6</td>
<td>10.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

NOTE: ++ rosin, synthetic polymer, resin and antioxidant. Not hazardous according to Canadian WHMIS criteria. Non-WHMIS controlled.

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:
Cyclohexane

2. PHYSICAL DATA

| BOILING POINT: Compressed gas | |
| VAPOR PRESSURE: Compressed gas | |
| VAPOR DENSITY: 2.97 | |
| EVAPORATION RATE: 1.9 | |
| SOLUBILITY IN WATER: Nil | |
| SP. GRAVITY: 0.702 Water = 1 | |
| PERCENT VOLATILE: ca. 75 % by wt | |
| VOLATILE ORGANICS: ca. 75 % | |
| VOC LESS H2O & EXEMPT SOLVENT (527 g/l) SCAQMD Rule 443.1, calculated ca. 75 % | |
| pH: N/A | |
| VISCOSITY: N/A | |
| MELTING POINT: N/D | |
| APPEARANCE AND ODOR: liquid in aerosol container, light cream colored, sweet/fruity odor. | |

3. FIRE AND EXPLOSION HAZARD DATA

| FLASH POINT: -50.00 F T.C.C. |
| FLAMMABLE LIMITS - LEL: N/A |
| FLAMMABLE LIMITS - UEL: Flamm. Gas |
| AUTOIGNITION TEMPERATURE: N/D |
| EXTINGUISHING MEDIA: Carbon dioxide, Dry chemical, Foam |

Abbreviations: N/D - Not Determined N/A - Not Applicable
3. FIRE AND EXPLOSION HAZARD DATA (continued)

SPECIAL FIRE FIGHTING PROCEDURES:
Wear full protective clothing, including helmet, self-contained,
positive pressure or pressure demand breathing apparatus, bunker coat
and pants, bands around arms, waist and legs, face mask, and
protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Closed containers exposed to heat from fire may build pressure and
explode. Vapors may travel long distances along the ground or floor
to an ignition source and flash back.

NFPA-HAZARD-CODES: HEALTH 2 FIRE 4 REACTIVITY 0
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
Heat
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide Toxic Vapors, Gases or
Particulates

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:
Refer to other sections of this MSDS for information regarding
physical and health hazards, respiratory protection, ventilation, and
personal protective equipment. Call (612) 733-1110 or (612) 733-6100
for 24-hour spill assistance. Ventilate area. Extinguish all
ignition sources. Collect using non-sparking tools. Cover with
absorbent material. Place in a U.S. DOT-approved container and seal.

RECOMMENDED DISPOSAL:
Incinerate in a permitted hazardous waste incinerator in the presence
of a combustible material. Facility must be capable of handling
aerosol cans. Dispose of empty cans in a sanitary landfill. Dispose
of waste product in a facility permitted to accept chemical waste.

ENVIRONMENTAL DATA:
Not determined.

REGULATORY INFORMATION:
Since regulations vary, consult applicable regulations or authorities

SARA HAZARD CLASS:
FIRE HAZARD: Yes PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: Yes

6. SUGGESTED FIRST AID

EYE CONTACT:
Immediately flush eyes with large amounts of water. Get immediate

Abbreviations: N/D - Not Determined N/A - Not Applicable
6. SUGGESTED FIRST AID (continued)

   medical attention.

   SKIN CONTACT:
   Flush skin with large amounts of water. If irritation persists, get
   medical attention.

   INHALATION:
   Remove person to fresh air. If not breathing, give artificial
   respiration. If breathing is difficult, get immediate medical
   attention.

   IF SWALLOWED:
   Do not induce vomiting. Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

   EYE PROTECTION:
   Avoid eye contact with vapor, spray, or mist. Wear vented goggles.
   Wear safety glasses with side shields.

   SKIN PROTECTION:
   Avoid skin contact. Wear appropriate gloves when handling this
   material. A pair of gloves made from the following material(s) are
   recommended: nitrile rubber, polyethylene/ethylene vinyl alcohol,
   polyvinyl alcohol, polytetrafluoroethylene (Teflon), fluoroelastomer
   (Viton).

   VENTILATION PROTECTION:
   Use in a well-ventilated area. Provide sufficient ventilation to
   maintain emissions below recommended exposure limits. If exhaust
   ventilation is not adequate, use appropriate respiratory protection.

   RESPIRATORY PROTECTION:
   Avoid inhalation of vapors, mists or spray. Select one of the
   following NIOSH approved respirators based on airborne concentration
   of contaminants and in accordance with OSHA regulations: half-mask
   organic vapor respirator.

   PREVENTION OF ACCIDENTAL INGESTION:
   Do not ingest.

   RECOMMENDED STORAGE:
   Store at temperatures below 120 degrees F (49 degrees C). Keep out
   of the reach of children.

   FIRE AND EXPLOSION AVOIDANCE:
   Aerosol container contains flammable gas under pressure. Keep away
   from heat, sparks, open flame, and other sources of ignition.
   Extremely flammable liquid and vapor. Do not pierce or burn
   container, even after use. Avoid static discharge.

Abbreviations: N/D - Not Determined  N/A - Not Applicable
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## 7. PRECAUTIONARY INFORMATION (CONTINUED)

### EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>VALUE</th>
<th>UNIT</th>
<th>TYPE</th>
<th>AUTH</th>
<th>SKIN*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NON-VOLATILE COMPONENTS - N.J.</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>TRADE SECRET (T.S.) REGISTRY NO. 04499600-5452F ++</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
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<tr>
<td>HEXANE (OTHER ISOMERS)</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
</tr>
<tr>
<td>CYCLOHEXANE</td>
<td>300 ppm</td>
<td>TWA</td>
<td>ACGIH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CYCLOHEXANE</td>
<td>300 ppm</td>
<td>TWA</td>
<td>OSHA</td>
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<tr>
<td>N-HEXANE</td>
<td>50 ppm</td>
<td>TWA</td>
<td>ACGIH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-HEXANE</td>
<td>50 ppm</td>
<td>TWA</td>
<td>OSHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISOBUTANE</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
</tr>
<tr>
<td>DIMETHYL ETHER</td>
<td>1000 ppm</td>
<td>TWA</td>
<td>CMRG</td>
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<td>OSHA</td>
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<tr>
<td>PROPANE</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>ACGIH</td>
<td>Simple asphyxiant</td>
</tr>
</tbody>
</table>

* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

### SOURCE OF EXPOSURE LIMIT DATA:
- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- CMRG: Chemical Manufacture Recommended Guidelines
- NONE: None Established

## 8. HEALTH HAZARD DATA

#### EYE CONTACT:
- Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

#### SKIN CONTACT:
- Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.
  - May be absorbed through the skin in harmful amounts.

#### INHALATION:
- Intentional concentration and inhalation may be harmful or fatal.
  - Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
  - Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

**WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE**

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**Abbreviations:**  
N/D - Not Determined  
N/A - Not Applicable
8. HEALTH HAZARD DATA (continued)

INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Peripheral Neuropathy: signs/symptoms can include tingling of extremities, incoordination, numbness, weakness and tremors.

IF SWALLOWED:
Ingestion is not a likely route of exposure to this product.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

Abbreviations: N/D - Not Determined  N/A - Not Applicable

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.