Section 1 - Chemical Product / Company Information

This Material Safety Data Sheet is available in Canadian French and Hispanic American Spanish upon request.
On peut demander cette fiche signalétique (MSDS) a la langue francaise-canadienne.
Los Datos de Seguridad del Producto pueden obtenerse en Espanol si lo riquiere.

Product Name: High Strength Spray Adhesive
Product UPC Number: 070798001213
Product Use/Class: Pressurized Solvent-based Spray Adhesive
Manufacturer: DAP Inc.
2400 Boston Street Suite 200
Baltimore, MD 21224-4723
888-327-8477 (non-emergency matters)

Revision Date: 09/10/2009
Supersedes: 08/31/2001
MSDS Number: 00030199001

Section 2 - Hazards Identification

Emergency Overview: A opaque pressurized liquid product with a solvent odor. DANGER! Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Vapors may ignite explosively. Keep away from heat, sparks and flame. Vapor inhalation may cause injury to blood and liver and may cause drowsiness. Do not breathe dust, vapors or spray mist. Use only with adequate ventilation. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. Causes eye, skin, nose, throat, lung and respiratory tract irritation. Vapors harmful if inhaled. Harmful by inhalation, in contact with skin and if swallowed. Harmful or fatal if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage. Causes eye irritation. Contents under pressure. Do not puncture can.

Refer to other MSDS sections for other detailed information.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Causes skin irritation. Prolonged and repeated skin contact may cause dermatitis, drying and defatting due to the solvent properties.

Effects Of Overexposure - Inhalation: Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea. Causes nose and throat irritation.

Effects Of Overexposure - Ingestion: Harmful or fatal if swallowed. If ingested, may cause vomiting, diarrhea, and depressed respiration. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis, which can be fatal.

Effects Of Overexposure - Chronic Hazards: NOTICE: Reports have associated repeated and prolonged occupational
overexposure to solvents with permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Prolonged or repeated contact with skin can cause defatting of the skin, which may lead to dermatitis. May cause kidney and liver damage as well as developmental and reproductive toxicity. n-Hexane exposure can cause nerve damage to arms and legs causing numbness of the fingers and toes, effect may be permanent. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination.

Primary Route(s) Of Entry: Skin Contact, Inhalation

Medical Conditions which May be Aggravated by Exposure: None known.

Carcinogenicity:
None

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CASRN</th>
<th>Wt%</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>10-30</td>
</tr>
<tr>
<td>Isobutane</td>
<td>75-28-5</td>
<td>10-30</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>10-30</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>10-30</td>
</tr>
<tr>
<td>Xylenes</td>
<td>1330-20-7</td>
<td>3-7</td>
</tr>
</tbody>
</table>

Section 4 - First Aid Measures

First Aid - Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

First Aid - Skin Contact: Wash off with soap and water. Wash thoroughly with soap and water. Remove and wash contaminated clothing.

First Aid - Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

First Aid - Ingestion: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Note to Physician: None.

COMMENTS: If over-exposure occurs, call your poison control center at 1-800-222-1222.

Section 5 - Fire Fighting Measures

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam

Unusual Fire And Explosion Hazards: Store away from caustics and oxidizers. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Containers may explode if exposed to extreme heat. Eliminate sources of ignition: heat, electrical equipment, sparks and flames. Vapors may form explosive mixtures with air.

Special Firefighting Procedures: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.
Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear proper protective equipment as specified in Section 8. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

Section 7 - Handling And Storage

Handling: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Do not breathe vapors. Vapors may cause flash fire. Use in well ventilated area. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Construction and repair activities can adversely affect indoor air quality. Consult with occupants or a representative (i.e. maintenance, building manager, industrial hygienist, or safety officer) to determine ways to minimize impact.

Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Make sure nozzle is directed away from yourself prior to discharge.

Storage: Keep containers tightly closed. Keep away from heat and sources of ignition. Avoid excessive heat and freezing. Do not store at temperatures above 120 degrees F. Protect material from direct sunlight. Store away from caustics and oxidizers.

Section 8 - Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CASRN</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>ACGIH CEIL</th>
<th>OSHA TWA</th>
<th>OSHA STEL</th>
<th>OSHA CEIL</th>
<th>Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-Hexane</td>
<td>110-54-3</td>
<td>50 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>500 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>Yes</td>
</tr>
<tr>
<td>Isobutane</td>
<td>75-28-5</td>
<td>1000 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>1000 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>No</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1000 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>1000 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>No</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>500 PPM</td>
<td>750 PPM</td>
<td>N.E.</td>
<td>1000 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>No</td>
</tr>
<tr>
<td>Xylenes</td>
<td>1330-20-7</td>
<td>100 PPM</td>
<td>150 PPM</td>
<td>N.E.</td>
<td>100 PPM</td>
<td>N.E.</td>
<td>N.E.</td>
<td>No</td>
</tr>
</tbody>
</table>

Precautionary Measures: Please refer to other sections and subsections of this MSDS.

Engineering Controls: Provide sufficient general and/or local exhaust ventilation to maintain exposure below recommended exposure limit. Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits. Vapors are heavier than air and may spread along floors. Check all low areas for presence of vapor. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. When concentrations exceed the exposure limits specified, use of a NIOSH approved full facepiece organic vapor cartridge respirator is recommended. Where the protection factor may be exceeded, use of a full facepiece supplied air respirator or Self Contained Breathing Apparatus (SCBA) may be necessary.

Respiratory Protection: If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Impervious gloves. Wear solvent impervious gloves.

Eye Protection: Goggles or safety glasses with side shields.

Other protective equipment: Not required under normal use.

Hygienic Practices: Remove and wash contaminated clothing before re-use.

Important: Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); these limits may vary between states.

Note: An employee's skin exposure to substances having a "YES" in the "SKIN" column in the table above shall be prevented or reduced to the extent necessary under the circumstances through the use of gloves, coveralls, goggles or other appropriate personal protective equipment, engineering controls or work practices.
Section 9 - Physical And Chemical Properties

Boiling Range: Not Established
Odor: Solvent
Color: Opaque
Solubility in H2O: Not Established
Freeze Point: Not Established
Vapor Pressure: Not Established
Physical State: Pressurized Liquid
Flash Point, F: Extremely Flammable.
Lower Explosive Limit, %: Not Established

Vapor Density: Heavier Than Air
Odor Threshold: Not Established
Evaporation Rate: Faster Than n-Butyl Acetate
Specific Gravity: 0.80
pH: Not Established
Viscosity: Not Established
Flammability: Level II Aerosol
Method: (Seta Closed Cup)
Upper Explosive Limit, %: Not Established

When reported, vapor pressure of this product has been calculated theoretically based on its constituent makeup and has not been determined experimentally.

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Excessive heat and freezing.

Incompatibility: Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products: Normal decomposition products, i.e., COx, NOx.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: Not Established
Product LC50: Not Established

<table>
<thead>
<tr>
<th>CASRN</th>
<th>Chemical Name</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-54-3</td>
<td>n-Hexane</td>
<td>Rat:28710 mg/kg</td>
<td>Rat:48000 ppm/4H</td>
</tr>
<tr>
<td>75-28-5</td>
<td>Isobutane</td>
<td>--------------</td>
<td>Rat:57 pph/15M</td>
</tr>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>--------------</td>
<td>Rat:50100 mg/m3/8H</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylenes</td>
<td>Rat:4300 mg/kg</td>
<td>Rat:5000 ppm/4H</td>
</tr>
</tbody>
</table>

Significant Data with Possible Relevance to Humans: None.

Section 12 - Ecological Information

Ecological Information: Ecological injuries are not known or expected under normal use.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste. Do not burn or use a cutting torch on the empty drum.

EPA Waste Code if Discarded (40 CFR Section 261): D001

Section 14 - Transportation Information

DOT Proper Shipping Name: Aerosols, Flammable
Packing Group: N.A.
Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

**Section 15 - Regulatory Information**

**CERCLA - SARA Hazard Category:**

This product has been reviewed according to the EPA ‘Hazard Categories’ promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard, Chronic Health Hazard, Fire Hazard, Pressurized Hazard

**SARA Section 313:**

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

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<tbody>
<tr>
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<tr>
<td>Xylenes</td>
<td>1330-20-7</td>
</tr>
</tbody>
</table>

**Toxic Substances Control Act:**

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes</td>
<td>1330-20-7</td>
</tr>
</tbody>
</table>

**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum hydrocarbon resin</td>
<td>68527-25-3</td>
</tr>
<tr>
<td>Styrene-Ethylene/Butylene-Styrene Block Copolymer</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Coumarone indene resin</td>
<td>68132-02-5</td>
</tr>
</tbody>
</table>

**Pennsylvania Right-to-Know:**

The following non-hazardous ingredients are present in the product at greater than 3%:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum hydrocarbon resin</td>
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<td>Styrene-Ethylene/Butylene-Styrene Block Copolymer</td>
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</tr>
<tr>
<td>Coumarone indene resin</td>
<td>68132-02-5</td>
</tr>
</tbody>
</table>

**California Proposition 65:**

None.
Section 16 - Other Information

HMIS Ratings:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Volatile Organic Compounds (VOC), less water less exempts: g/L: 432.9 lb/gal: 3.61 wt:wt%: 54.000

Volatile Organic Compounds (VOC), less water less exempts, less LVP-VOCs: wt:wt%: 54.00

REASON FOR REVISION: Periodic Update

Legend:

- N.A. – Not Applicable
- ACGIH – American Conference of Governmental Industrial Hygienists
- N.E. – Not Established
- SARA – Superfund Amendments and Reauthorization Act of 1986
- N.D. – Not Determined
- NJRTK – New Jersey Right-to-Know Law
- VOC – Volatile Organic Compound
- OSHA – Occupational Safety and Health Administration
- PEL – Permissible Exposure Limit
- HMIS – Hazardous Materials Identification System
- TLV – Threshold Limit Value
- NTP – National Toxicology Program
- CEIL – Ceiling Exposure Limit
- STEL – Short Term Exposure Limit
- LD50 – Lethal Dose 50
- LC50 – Lethal Concentration 50
- F – Degree Fahrenheit
- MSDS – Material Safety Data Sheet
- C – Degree Celsius
- CASRN – The Chemical Abstracts Service Registry Number

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

<End of MSDS>