MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 HEAVY DUTY SUBFLOOR ADHESIVE
MSDS Number: 45011
Version Number: 3
Revision Date: OCT-12-2005
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SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: SF-450 HEAVY DUTY SUBFLOOR ADHESIVE
HMIS Hazard Rating:
  Health: 1  Fire: 3  Reactivity: 0  PPE: B

Company Identification:
HENKEL CONSUMER ADHESIVES
7405 PRODUCTION DRIVE
MENTOR OH 44060

Contact (24 hour):
Customer Affairs (800)321-0253
Information phone/Fax:
(440) 255-8900 / (440) 974-8358
CHEMTREC Emergency (24 hour):
(703) 527-3887 (International)
(800) 424-9300
in Canada CANUTEC
613-996-6666

Product Class: ADHESIVE
Trade Name: PRO-SERIES
Product Code: 45011,45029,30,95

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredient Name  CAS Number  Percent  TSCA
Light Aliphatic Naphtha  64742-89-8  10 - 15  Y
Toluene  108-88-3  5 - 10  Y
n-Hexane  110-54-3  5 - 10  Y
Ethanol  64-17-5  < 5.0  Y

Ingredient Notes:
Remaining ingredients are not considered OSHA hazardous.

SECTION III - PHYSICAL AND CHEMICAL PROPERTIES

Form: Dk. Tan, non-sag mastic.
Odor: mild
Solubility (in water): insoluble
pH Value, +/- .3: Not Applicable
Boiling Range: 150.0°F - 230.0°F (65.56°C - 110.0°C)
Vapor Pressure (mmHg): 155.8 @ 68.0°F (20.0°C)
Evaporation Rate: 4.8 times Faster than n-Butyl Acetate
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Vapor Density: Heavier than air

% Volatile, Weight 33.9%
% Volatile, Volume 45.4%
Specific Gravity: 1.123
VOC (less H2O or exempt) 380 Gr/L (33%)

NOTE:
*BOIL RANGE, EVAP RATE, VAPOR DENSITY AND PRESSURE FOR SOLVENT ONLY!

SECTION IV - FIRE FIGHTING MEASURES (Flash,UEL,LEL for solvent only)
Flammability Class I B
Flash Range: 0.0°F - 60.0°F (-17.78°C - 15.56°C)
Tag Closed Cup
Explosive Range (LEL/UEL): 1.6%
7.6%

EXTINGUISHING MEDIA:
Carbon Dioxide---Dry Chemical---Foam
Use water fog to cool material in vicinity of fire.

SPECIAL FIRE-FIGHTING PROCEDURES:
Use self-contained breathing apparatus with full facepiece
operated in pressure demand with full protective equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Any closed container may rupture when exposed to extreme heat.
Solvent vapors are heavier than air and travel along the ground.
Vapors given off are flammable and may be ignited in air explosively.

SECTION V - HEALTH HAZARD DATA

ROUTES OF ENTRY:
ENTRY THROUGH... Inhalation and skin most likely

CARCINOGENICITY...
NTP? N/E | IARC Monographs? N/E | OSHA? NO

EFFECTS OF OVEREXPOSURE
Eyes: Can cause irritation, redness, tearing and blurred vision.
Skin: Prolonged or repeated contact can cause moderate irritation, drying of the skin, and dermatitis.
Inhalation: Excessive inhalation of vapors can cause respiratory irritation, headache, drowsiness and fatigue. High concentrations of vapors are anesthetic and may cause central nervous system effects such as dizziness.
Ingestion: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

FIRST AID MEASURES
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Eyes: Flush eyes gently with water for at least 15 minutes
       lifting eyelids occasionally; get prompt medical attention
Skin: Wash thoroughly with soap and water; apply a mild skin cream.
       Remove contaminated clothing.
Inhalation: Move affected person to fresh air; if breathing is
difficult, administer oxygen; if breathing has stopped,
give artificial respiration. Get medical attention.
Ingestion: DO NOT INDUCE VOMITING! Get immediate medical attention.

CHRONIC HAZARDS
NOTICE: Reports have associated repeated and prolonged
       occupational overexposure to solvents with permanent brain,
       nervous system, liver or kidney damage or may cause cardiac
       arrhythmia. INTENTIONAL misuse of this product by
       deliberately inhaling its vapors may be harmful or fatal.
N-HEXANE can cause peripheral neuropathy (arm and leg damage) and
central nervous system damage. Prolonged and repeated exposure has
been suggested as a cause of the following effects in lab animals:
liver and reproductive abnormalities, kidney, spleen, lung or eye damage
May aggravate pre-existing disorders of these organs in humans.
May be harmful if absorbed through skin.
Repeated overexposure to TOLUENE may cause liver damage.
Toluene has been found to cause Kidney, Lung and Spleen damage
in laboratory animals.

SECTION VI - STABILITY AND REACTIVITY
Stability: This product is stable
Hazardous Polymerization: Hazardous polymerization will not occur

INCOMPATABILITY:
Keep away from strong oxidizing agents.

CONDITIONS TO AVOID:
Keep away from heat, spark, open flames and any ignition source.
HAZARDOUS DECOMPOSITION PRODUCTS:
Will produce fumes and smoke containing carbon monoxide and
       dioxide under fire conditions.

SECTION VII - ACCIDENTAL RELEASE AND DISPOSAL MEASURES:

STEPS TO BE TAKEN IN CASE OF SPILL:
Eliminate all ignition sources. Ventilate confined areas.
(Open windows and doors). Wear appropriate protective clothing.
Cover with absorbent. Scoop into sealable safety container.

WASTE DISPOSAL METHOD:
Dispose of following local, state, and federal regulations.

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SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH TLV</th>
<th>ACGIH TLV-C</th>
<th>ACGIH STEL</th>
<th>OSHA STEL</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Aliphatic Naphtha</td>
<td>300.00 PPM</td>
<td>N/est</td>
<td>N/est</td>
<td>500.00 PPM</td>
<td>300.00 PPM</td>
</tr>
<tr>
<td>Toluene</td>
<td>500.00 PPM</td>
<td>N/est</td>
<td>150.00 PPM</td>
<td>150.00 PPM</td>
<td>150.00 PPM</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>50.00 PPM</td>
<td>N/est</td>
<td>N/est</td>
<td>N/est</td>
<td>50.00 PPM</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1000.00 PPM</td>
<td>N/est</td>
<td>N/est</td>
<td>N/est</td>
<td>1000.00 PPM</td>
</tr>
</tbody>
</table>

RESPIRATORY PROTECTION:
If TLV of the product is exceeded, a NIOSH/MSHA jointly approved air supply respirator is advised in the absence of proper ventilation. OSHA regulations also permit the use of other types of NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier for more information)

VENTILATION:
Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV.
Ventilate during application and curing of this product.

PROTECTIVE CLOTHING:
Rubber gloves should be worn where skin contact is likely.
Wear impervious clothing and shoes.

EYE PROTECTION:
Chemical goggles or safety glasses should be worn.

HANDLING AND STORAGE PRECAUTIONS:
Keep away from heat, spark and flame.
Keep out of reach of children.
Keep container closed while not in use.
Do not cut or burn recepticals that have contained a solvent based product. Do not reuse this container.
Use only in a well ventilated area.

N/A=NOT APPLICABLE   N/AV=NOT AVAILABLE   N/E, N/est=NOT ESTABLISHED

SECTION IX - TRANSPORT INFORMATION: (not all sizes available)

GROUND TRANSPORT (DOT) - DOMESTIC
Units less than 5L (1.3 gallons liquid) i.e.10oz, 28oz, 1 gal.
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Proper Shipping Name: CONSUMER COMMODITY
Classification: ORM-D
DOT Label Required: ORM-D
Shipping Document: CONSUMER COMMODITY, ORM-D
ERG Code: 171

Units GREATER than 5L i.e. 5 gal. pail
Proper Shipping Name: ADHESIVE
Classification: CLASS 3
DOT Label Required: Flammable Liquid, UN1133, Class 3
Shipping Document: ADHESIVE, 3, UN1133, PGIII,
                        for 50 gal. drum use PG II
ERG Code: 128

AIR TRANSPORT (DOT) - DOMESTIC
Units less than 5L (1.3 gallons liquid) i.e.10oz,28oz, 1gal.

Proper Shipping Name: CONSUMER COMMODITY
Classification: ORM-D
DOT Label Required: ORM-D-AIR
Shipping Document: Consumer Commodity, ORM-D
ERG Code: 171

Units GREATER than 5L i.e. 5 gal. pail
Proper Shipping Name: ADHESIVE
Classification: Class 3
DOT Label Required: Flammable Liquid, UN 1133, Class 3
Shipping Document: ADHESIVE, 3, UN1133, PG III,
                        for 50 gal. drum use PG II
ERG Code: 128

AIR TRANSPORT (IATA) - INTERNATIONAL
Units less than 5L (1.3 gallons liquid) i.e.10oz,28oz, 1 gal.

Proper Shipping Name: CONSUMER COMMODITY
Classification: class 9
Label Required: ID8000
Shipping Document: Consumer Commodity, 9, ID8000
ERG Code: 9L

Units GREATER than 5L i.e. 5 Gal. pail, 50 gal.drum
Proper Shipping Name: ADHESIVE
Classification: Class 3
Label Required: Flammable Liquid, UN 1133, Class 3
Shipping Document: ADHESIVE, 3, UN1133, PGIII,
                        for 50 gal. drum use PG II
ERG Code: 3L

MARINE - OCEAN TRANSPORT (IMDG)
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Units less than 5L (1.3 gallons liquid) i.e. 10oz, 28oz, 1 gal.

Proper Shipping Name: ADHESIVE
Classification: Class 3
Label Required: Flammable Liquid, UN1133, Class 3, Ltd. Qty.
(on Ocean container only, not required on cartons)
Shipping Document: ADHESIVE, 3, UN1133, PG III, LTD. QTY.
EMS Code: F-E, S-D

Units GREATER than 5L i.e. 5 gal. pail, 50 gal drum
Proper Shipping Name: ADHESIVE
Classification: Class 3
Label Required: Flammable Liquid, UN 1133, Class 3
Shipping Document: ADHESIVE, 3, UN1133, PGII, for 50 gal. drum use PG II
EMS Code: F-E, S-D

SECTION X - REGULATORY INFORMATION:
SARA TITLE III SECTION 313:
This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>5 - 10</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>5 - 10</td>
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-PROP 65 (TERATOGEN)
WARNING: This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

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<tbody>
<tr>
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The following ingredients are registered for TSCA 12B

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<td>n-Hexane</td>
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SARA Section 311/312 Hazard Categories met: Fire Hazard, Immediate (Acute) and Delayed (Chronic) Health Hazards.
Chemical ingredients are listed on the TSCA inventory.

DISCLAIMER:
The information contained herein is based on data available as of the
date of preparation of this MSDS and which we believe to be reliable. However, no warranty is expressed or implied regarding the accuracy of the data. We shall not be responsible for the use of this information, or of any product, method, apparatus mentioned, and user must make his own investigation to determine the suitability of the information or products for his particular purpose, for the protection of the environment, and the health & safety of the users of this material.