

MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 SUBFLOOR ADHESIVE VOC Compliant
MSDS Number: 1283155
Version Number 4
Revision Date: JAN-27-2009
Page Number: 1

SECTION I - PRODUCT AND COMPANY INFORMATION

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

Company Identification: HENKEL CORPORATION
7405 PRODUCTION DRIVE
MENTOR OH 44060

Contact (24 hour): Consumer Help (800)624-7767
CHEMTREC Emergency (24 hour):(703) 527-3887 (International)
(800) 424-9300
in Canada CANUTEC 613-996-6666

Product Class ADHESIVE
Trade Name OSI
Product Code See above

SECTION II - INGREDIENT AND HAZARD INFORMATION

Table with 4 columns: Hazardous Ingredient Name, CAS Number, Percent, TSCA. Rows include ACETONE, Light Aliphatic Naphtha, Methyl Acetate, Toluene, n-Hexane, Heavy Naphthenic Oil, and Ethanol.

Ingredient Notes:
Remaining ingredients are not considered OSHA hazardous.

SECTION III - PHYSICAL AND CHEMICAL PROPERTIES

Form: Non-sag mastic
Appearance/Color: Tan
Odor: Sharp
Solubility (in water): insol. in water

MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 SUBFLOOR ADHESIVE VOC Compliant
MSDS Number: 1283155
Version Number 4
Revision Date: JAN-27-2009
Page Number: 2

pH Value, +/-: .3: Not Applicable
Boiling Range: 150.°F - 250.°F (65.56°C - 121.11°C)
Vapor Pressure (mmHg): 155.@ 68.°F (20.°C)
Evaporation Rate: 5.5 times Faster than n-Butyl Acetate

Vapor Density: Heavier than air

% Volatile, Weight 28.%
% Volatile, Volume 40.%
Specific Gravity: 1.1653
VOC (less H2O or exempt) < 195 gr/L, 13%

NOTE:

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

SECTION IV - FIRE FIGHTING MEASURES

Flammability Class I B
Flash Point: 0.°F - 9.°F (-17.78°C - -12.78°C)
Tag Closed Cup
Explosive Range (LEL/UEL): 1.%
6.5%

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

| Route | Species | Exposure and Dose |
|-------------------------|---------|-------------------|
| Light Aliphatic Naphtha | | LD50 74. PPM |
| | | LD50 18000. PPM |
| | | LD50 5000. PPM |
| Methyl Acetate | | LD50 5000. mg/kg |
| n-Hexane | | LD50 5000. PPM |

MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 SUBFLOOR ADHESIVE VOC Compliant
MSDS Number: 1283155
Version Number 4
Revision Date: JAN-27-2009
Page Number: 3

Ethanol

LD50 14000. PPM

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, defatting, and dermatitis.

Inhalation: May cause nose or throat irritation. High concentrations may cause acute central nervous system depression characterized by headaches, dizziness, nausea and confusion.

Ingestion: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

FIRST AID MEASURES

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: Product is stable under normal storage conditions

Hazardous Polymerization: Will not occur under normal conditions

MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 SUBFLOOR ADHESIVE VOC Compliant
MSDS Number: 1283155
Version Number 4
Revision Date: JAN-27-2009
Page Number: 4

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.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Table with 5 columns: Substance, ACGIH TLV, ACGIH TLV-C, ACGIH STEL, OSHA STEL, OSHA PEL. Rows include ACETONE, Light Aliphatic Naphtha, Methyl Acetate, Toluene, n-Hexane, Heavy Naphthenic Oil, and Ethanol.

RESPIRATORY PROTECTION:

If TLV of the product is exceeded, a NIOSH/MSHA jointly approved air supply respirator is advised in the absence of proper

MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 SUBFLOOR ADHESIVE VOC Compliant
MSDS Number: 1283155
Version Number 4
Revision Date: JAN-27-2009
Page Number: 5

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.

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

MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 SUBFLOOR ADHESIVE VOC Compliant
MSDS Number: 1283155
Version Number 4
Revision Date: JAN-27-2009
Page Number: 6

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 500ml (16.9 fl oz) i.e.10oz.
Proper Shipping Name: CONSUMER COMMODITY
Classification: class 9
Label Required: ID8000
Shipping Document: Consumer Commodity,9, ID8000
ERG Code: 9L

Units Greater than 500ml and less than 5L i.e. 28oz., 1 gal
Proper Shipping Name: ADHESIVES
Classification: Class 3
Label Required: Flammable Liquid, UN1133, Class 3
Shipping Document: UN1133, Adhesives, Class 3, PGIII, Limited
Quantity, NAERG #128

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)

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, PGIII,

MATERIAL SAFETY DATA SHEET

MSDS Name: SF-450 SUBFLOOR ADHESIVE VOC Compliant
MSDS Number: 1283155
Version Number 4
Revision Date: JAN-27-2009
Page Number: 7

EMS Code: for 50 gal. drum use PG II
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:

| Ingredient Name | CAS Number | Percent |
|-----------------|------------|---------|
| Toluene | 108-88-3 | < 5.0 |
| n-Hexane | 110-54-3 | < 5.0 |

SARA Section 311/312 Hazard Categories met: Fire Hazard, Immediate (Acute) and Delayed (Chronic) Health Hazards.

Chemical ingredients are listed on the TSCA inventory.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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.