

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Name: Armaflex 520 Adhesive
Description: Solvent-dispersed synthetic rubber resin adhesive

II. DEPARTMENT OF TRANSPORTATION INFORMATION

SHIPPING NAME: Adhesive containing a flammable liquid (Hexane and Acetone)
HAZARD CLASS: 3 (flammable liquid) ID#: UN1133 PG: II (Armaflex 520 adhesive)
REPORTABLE QUANTITY (RQ): 6250 lbs.
EMERGENCY ONLY CONTACT: CHEM-TEL 1-800-255-3924

III. HMIS (0=Minimal hazard; 4=severe hazard)

Health = 2 Flammability = 3 Reactivity = 0

IV. PRODUCT CONTENT

This product contains chemicals 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. All components are on TSCA inventory. This product does NOT contain asbestos or polychlorinated biphenyls.

V. HAZARDOUS INGREDIENTS

INGREDIENT:	CAS Number	PERCENT:	OSHA PEL	ACGIH TLV
Acetone	67-64-1	25-27%	750 ppm STEL 1000 ppm	500 ppm STEL 750 ppm
Toluene	108-88-3	16-18%	100 ppm STEL 150 ppm	50 ppm (skin)
Hexane	110-54-3	35-37%	50 ppm	50 ppm (skin)

VI. PHYSICAL DATA

APPEARANCE AND COLOR: Straw colored liquid with characteristic solvent odor. BOILING POINT: ($^{\circ}$ F): >152. VAPOR PRESSURE: (mm Hg @ 20 $^{\circ}$ C) 180. VAPOR DENSITY: (air=1) N/K. SOLUBILITY IN WATER: Negligible. SPECIFIC GRAVITY: (water=1): 0.82. PERCENT VOLATILE BY WEIGHT (30 minutes @ 275 $^{\circ}$ F): 79.0%. EVAPORATION RATE: (butyl acetate =1): N/K. VISCOSITY 155-195 cps. pH: N/K VOC: 596 g/L calculated at 70 $^{\circ}$ F, SCAQMD.

VII. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: -4 $^{\circ}$ F based on acetone (CC). FLAMMABLE RANGE: LEL = 1.1, UEL = 13.0 (based on hexane and acetone). EXTINGUISHING MEDIA: Carbon dioxide, dry chemical alcohol-type foam. SPECIAL FIRE FIGHTING PROCEDURES: Protect fire fighters from toxic products of combustion by wearing self-contained breathing apparatus. UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers in a fire may rupture due to pressure build up. Use water to cool containers to prevent this.

VIII. HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation and direct dermal exposure. TARGET ORGANS: Upper respiratory tract, skin and eyes. EFFECTS OF OVEREXPOSURE: Skin and Eyes: Excessive skin contact may cause drying and cracking of skin, deflating of tissue and result in dermatitis. Contact with eyes will cause irritation. INHALATION: May cause irritation of respiratory tract, coughing and CNS effects, such as headache, dizziness, and nausea. CARCINOGENICITY: NTP: No. IARC Monographs: No. OSHA Regulated: No. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Any condition generally aggravated by solvents; preexisting upper respiratory and lung disease such as, but not limited to, bronchitis, emphysema and asthma. FIRST AID PROCEDURES: SKIN AND EYES: Flush any skin or eye contact with plenty of water. Additionally with skin contact, wash skin thoroughly with soap and water. Refer to physician if irritation persists. INHALATION: Remove to fresh air if exposed to excess concentration of vapor. Seek medical attention if symptoms persist. INGESTION: Do not induce vomiting. Call Poison control center or physician for guidance.

IX. REACTIVITY DATA

STABILITY: Stable. INCOMPATIBILITY: Strong oxidizing agents. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and other toxic vapors and gases that are common to thermal degradation of organic compounds. HAZARDOUS POLYMERIZATION: Will not occur.

ARMAFLEX 520 ADHESIVE

Prepared 8/10 replaces 6/09

Made in USA for
ArmaceLL LLC
7600 Oakwood Street Extension
Mebane, NC 27302
(919)-304-3846

X. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Ventilate area of spill or leak, if using mechanical ventilation, make sure that it is explosion proof or does not present an ignition source. For exposures above TLV, wear approved respiratory equipment. Contain spill and prevent it from entering sewer lines or waterways. Use absorbent to assist with the pick up of material. Scrape up adhesive and place in container. WASTE DISPOSAL METHOD: Dispose of container and any unused contents in accordance with federal, state and local waste disposal regulations. Do not flush unused contents or residue down drains. Do not reuse container.

XI. SAFE HANDLING AND USE INFORMATION

VENTILATION: Extremely flammable vapors may ignite explosively or cause flash fire. Use natural cross ventilation, local (mechanical) pick up or general area (mechanical) ventilation to prevent accumulation of solvent vapors, keeping in mind that the ventilation pattern must remove the heavier than air solvent vapors from the lower levels of the work spaces. The ventilation should be sufficient to keep the solvent vapor concentration below the TLV. RESPIRATORY PROTECTION: With adequate ventilation, respiratory equipment should not be needed. If adequate ventilation is not afforded, wear respiratory equipment approved for organic vapors. SKIN AND EYE PROTECTION: During the manufacture and packaging of this product, impervious gloves, eye protection and eye wash station may be appropriate. During normal end product use, cotton or loop-pile gloves and safety glasses are recommended to prevent contact with this mastic product.

XII. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in an area suitable for flammable mixtures. Recommended storage temperature is below 90 $^{\circ}$ F. OTHER PRECAUTIONS: Vapors are flammable and are heavier than air. Prohibit smoking and eliminate all other sources of ignition, such as regular electric tools and appliances. Make sure that pilot lights on gas fired water heaters are extinguished. WARNING: This product contains toluene, a chemical known to the state of California to cause birth defects or other reproductive harm. WORKSITE ENVIRONMENT: Initially there may be a potential adverse impact on indoor air quality within the general work area during installation. Therefore, you should advise the building manager or other appropriate person that: it will be necessary to establish and maintain adequate ventilation of the work area, without causing the entry of contaminants to other parts of the building. Persons who are sensitive to odors and/or chemicals should avoid the work area during this process.

The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.