

**For Chemical Emergency**

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**SECTION I - IDENTIFICATION OF PRODUCT**  
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**PRODUCT NAME:** Amtech 2.1 VOC Slow Hardener  
**PRODUCT CODE:** (999522), AM-280-4, AM-280-12  
**SYNONYM/CROSS REFERENCE:** Paint Activator  
**SCHEDULE B NUMBER:** 3815.90.0000

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**SECTION II - HAZARDOUS INGREDIENTS**  
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INGREDIENTS	WGT%	CAS #	TLV/PEL
Isocyanate Pre-polymer	40-50%	28182-81-2	N/E
Hexamethylene Diisocyanate	<0.10%	822-06-0	TLV 005 ppm; PEL 005 ppm
Methyl Amyl Ketone	10-20%	110-43-0	TLV 50 ppm PEL 100 ppm
PM Acetate	10-20%	108-65-6	N/E Recommended TLV 100 ppm
EB Acetate	10-20%	112-07-2	TLV 20 ppm
Parachlorobenzotrifluoride (PCBTF)	10-20%	98-56-6	N/E

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**SECTION III - PHYSICAL DATA**  
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**APPEARANCE:** Clear liquid with organic solvent odor  
**SPECIFIC GRAVITY:** 1.06  
**VAPOR PRESSURE (mmHG):** N/Av  
**BOILING POINT:** 248-311°F  
**VAPOR DENSITY:** Heavier than air  
**EVAPORATION RATE (Ethyl Ether = 1):** Slower than Ethyl Ether  
**VOLATILES BY WEIGHT:** Approx 57%  
**SOLUBILITY IN WATER:** Insoluble  
**VOC:** Grams/Liter = 420  
Lbs/Gallon = 3.50

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**SECTION IV - FIRE AND EXPLOSION DATA**  
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**FLASH POINT:** 102°F/39°C Seta Flash Closed cup  
**LOWER FLAMMABLE LIMIT %:** N/E  
**UPPER FLAMMABLE LIMIT %:** N/E  
**FIRE EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical, Foam  
**SPECIAL FIRE FIGHTING PROCEDURES:** Fight like a fuel oil fire. Cool fire exposed containers with water spray. Firefighter should wear OSHA/NIOSH approved self-contained breathing apparatus.  
**UNUSUAL FIRE AND EXPLOSION HAZARD:** Closed containers exposed to high temperatures, such as fire conditions may rupture.

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**SECTION V - HEALTH HAZARD/TOXICOLOGICAL PROPERTIES**

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**OVEREXPOSURE EFFECTS:**

**ACUTE EFFECTS:**

**EYES:** Contact with eyes can cause irritation, redness, tearing, blurred vision, and/or swelling.

**SKIN:** Contact with skin can cause irritation, (minor itching, burning and/or redness), Dermatitis, defatting may be readily absorbed through the skin.

**INHALATION:** Inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and/or asphyxiation. Aspiration of material into lungs may result in chemical pneumonitis which can be fatal.

**INGESTION:** Ingestion can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

**CHRONIC EFFECTS:**

Overexposure to this material has apparently been known to cause the following effects in lab animals: Sensitization to skin and/or lungs, central nervous system damage, fetotoxicity, blood abnormalities

**CARCINOGEN:** YES \_\_\_\_\_ NO X

**TERATOGEN:** YES \_\_\_\_\_ NO X

**MUTAGEN:** YES \_\_\_\_\_ NO X

**ISOCYANATES/DIISOCYANATES**

**Aliphatic Polyisocyanate or Polymeric Isophorone Diisocyanate or Polyisocyanate:**

Repeated exposure may cause allergic skin rash, itching, swelling. Repeated overexposure to Isocyanates may cause lung injury, including a decrease in lung function, which may be permanent. Overexposure may cause asthma-like reactions with shortness of breath, wheezing, cough which may be permanent or permanent lung sensitization. This effect may be delayed for several hours after exposure. Individuals with preexisting lung disease, asthma or breathing difficulties may have increased susceptibility to the toxicity of excessive exposure.

**1,6 Hexamethylene Diisocyanate:**

May cause temporary upper respiratory and/or lung irritation with cough, difficult breathing, or shortness of breath. Overexposure may cause asthma-like reactions with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Prolonged skin contact may cause chemical burns. Liquid splashes in the eye may result in chemical burns. Individuals with preexisting lung disease, asthma or breathing difficulties may have increased susceptibility to the toxicity of excessive exposures.

**PRIMARY ROUTES OF EXPOSURE:** skin, inhalation, eyes

**FIRST AID:**

**INHALATION:** If inhaled, remove victim from exposure to a well-ventilated area. Make them comfortably warm, but not hot. Use oxygen or artificial respiration as required. Consult a physician.

**SKIN:** For skin contact, wash promptly with soap and excess water.

**EYES:** For eye contact, flush promptly with excess water for at least fifteen minutes. Consult a physician.

**INGESTION:** If ingested, do not induce vomiting. Give victim a glass of water. Call a physician immediately.

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**SECTION VI - REACTIVITY DATA**

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**STABILITY:** Stable

**CONDITIONS TO AVOID:** Open flames, sparks, heat, electrical and static discharge.

**INCOMPATIBILITY MATERIALS TO AVOID:** Strong acids, alkalis, oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Dioxide, Carbon Monoxide and Carbon.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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**SECTION VII - SPILL AND DISPOSAL PROCEDURE**

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**SPILLS, LEAK OR RELEASE:** Ventilate area. Remove all possible sources of ignition. Avoid prolonged breathing of vapor. Contain spill with inert absorbent.

**WASTE DISPOSAL:** Dispose of in accordance with local, state, and federal regulations.

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**SECTION VIII - PROTECTION INFORMATION**

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**RESPIRATORY PROTECTION:** If component TLV limits are exceeded, use NIOSH/MSHA approved respirator to remove vapors. Use an air-supplied respirator if necessary.

**VENTILATION:** Use adequate ventilation in volume and pattern to keep TLV/PEL below recommended levels. Explosion-proof ventilation may be necessary.

**PROTECTIVE GLOVES:** To prevent prolonged exposure use rubber gloves; solvents may be absorbed through the skin

**EYE PROTECTION:** Safety Glasses or goggles with splash guards or side shields.

**OTHER PROTECTIVE EQUIPMENT:** Wear protective clothing as required to prevent skin contact.

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**SECTION IX - HANDLING AND STORAGE PRECAUTIONS**

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**STORAGE AND HANDLING:** Use with adequate ventilation. Avoid contact with eyes and skin. Avoid breathing vapors. Do not store the product above 100°F/38°C. Do not flame, cut, braze weld or melt empty containers. Keep the product away from heat, open flame, and other sources of ignition. Avoid contact with strong acids, alkalis and oxidizers.

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**SECTION X - ADDITIONAL INFORMATION**

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**SHIPPING INFORMATION:** Please comply with DOT regulations in USA

**HMIS RATING:**

Health	2	4 = Extreme
Fire	2	3 = High
Reactivity	0	2 = Moderate
		1 = Slight
		0 = Insignificant

Personal Protection - See Section VIII

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**CALIFORNIA PROPOSITION 65:**

This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm may be present in this product.

**SECTION 313 SUPPLIER NOTIFICATION:**

This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

<u>CHEMICAL NAME</u>	<u>CAS</u>	<u>% BY WGT</u>
Glycol Ethers	N/A	10-20%

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS's THAT ARE COPIED AND DISTRIBUTED FOR THIS CHEMICAL

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ABBREVIATIONS

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IARC = International Agency for Research on Cancer  
ACGIH = American Conference of Governmental Industrial Hygienists  
NIOSH = National Institute of Occupational Safety and Health  
TLV = Threshold Limit Value  
PEL = Permissible Emission Level  
DOT = Department of Transportation  
NTP = National Toxicology Program  
N/AV = Not Available  
N/AP = Not Applicable  
N/E = Not Established  
N/D = Not Determined

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REVISION: n/a

The information in the Material Safety Data Sheet has been compiled from our experience and from data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of the safety precautions as may be necessary. We reserve the right to revise Material Safety Data Sheets from time to time as new technical information becomes available. The user has the responsibility to contact the Company to make sure that the MSDS is the latest one issued.