

MATERIAL SAFETY DATA SHEET

OSHA - Meets 29 CFR 1910.1200 Standards



HMIS HAZARD RATINGS

HEALTH	1	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	3	1 = SLIGHT	4 = EXTREME
REACTIVITY	0	2 = MODERATE	

TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Flammable liquids, n.o.s. (heptane)		
HAZARD CLASS / PKG GRP:	3 / III	REF:	49 CFR 173.150, .203, .242
IDENTIFICATION NUMBER:	UN 1993	LABEL:	FLAMMABLE LIQUID

SECTION 1 - PRODUCT / COMPANY IDENTIFICATION

IDENTITY (AS USED ON LABEL AND LIST) SANTECH A / C FLUSH	Page 1 of 2
MANUFACTURER'S NAME Santech Industries, Inc.	EMERGENCY TELEPHONE NUMBER Chemtrec (800) 424-9300
ADDRESS (NUMBER, STREET, P.O. BOX) 2450 Handley Ederville Rd.	TELEPHONE NUMBER FOR INFORMATION (817) 589-1212
(CITY, STATE AND ZIP CODE) Ft. Worth, TX 76118-	DATE PREPARED: May 3, 2000 SUPERSEDES: April 5, 2000

SECTION 2 - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

HAZARDOUS COMPONENTS <small>(SPECIFIC CHEMICAL IDENTITY; COMMON NAME(S))</small>	CAS #	% <small>(OPTIONAL)</small>	OSHA PEL		ACGIH TLV		SARA TITLE III	RQ LBS
			PPM	MG/M ³	PPM	MG/M ³		
Heptane	142-82-5	65 - 75	500	2000				
Isopropyl alcohol	67-63-0	20 - 30	400	980	500	1225		

SECTION 3 - HEALTH HAZARD DATA

ROUTES OF ENTRY - SIGNS AND SYMPTOMS OF EXPOSURE	EMERGENCY AND FIRST AID PROCEDURES
INHALATION: High concentrations are irritating to the respiratory tract; may cause headache, dizziness, nausea, vomiting and malaise.	Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.
SKIN: Brief contact may cause slight irritation; prolonged contact may cause moderate irritation or dermatitis.	Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.
EYES: High vapor concentration or contact may cause irritation and discomfort.	Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
INGESTION: May result in vomiting; aspiration of vomitus into the lungs must be avoided; DO NOT induce vomiting. Minute amounts aspirated into the lungs can produce severe lung injury, chemical pneumonitis, pulmonary edema or death.	DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.

HEALTH HAZARDS (ACUTE AND CHRONIC): Acute effects are possible irritation and discomfort; no known chronic effects have been established. Harmful or fatal if swallowed. Vapor harmful.

CARCINOGENICITY No additional information	NTP?	No	IARC MONOGRAPHS?	No	OSHA REGULATED?	No
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MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Preexisting skin, eye, or respiratory disorders may become aggravated through prolonged exposure.

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SECTION 4 - FIRE FIGHTING MEASURES	
FLASH POINT (METHOD USED) < 20° F (TCC)	FLAMMABLE LIMITS LEL: 1.2% UEL: 6.7%
EXTINGUISHING MEDIA Carbon dioxide, water fog, dry chemical, chemical foam	
SPECIAL FIRE FIGHTING PROCEDURES Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire - exposed containers cool.	
UNUSUAL FIRE AND EXPLOSION HAZARDS Closed containers can explode due to buildup of pressure when exposed to extreme heat. Do not use direct stream of water on pool fires as product may reignite on water surface. Caution - Material is flammable!	
SECTION 5 - ACCIDENTAL RELEASE MEASURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: CAUTION - FLAMMABLE - Evacuate and ventilate area; remove all sources of sparks, ignition and open flames; confine and absorb into approved absorbent; place material into approved containers for disposal; do not wash to sewer or waterway.	
SECTION 6 - HANDLING AND STORAGE	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. CAUTION - FLAMMABLE - keep away from all sources of ignition. "Empty" containers may contain residue which may form explosive vapors. Do not weld or cut near empty container that has not been professionally reconditioned. Use non-sparking tools when opening and closing containers. Maintain well ventilated work areas to minimize exposure when handling this material.	
SECTION 7 - EXPOSURE CONTROLS / PERSONAL PROTECTION	
RESPIRATORY PROTECTION (SPECIFY TYPE): None required while threshold limits (Section 2) are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 for complete regulations.	
VENTILATION LOCAL EXHAUST: Required MECHANICAL (GENERAL): Yes	SPECIAL: To maintain minimum TWA and STEL levels. OTHER: Engineering and work controls as required.
PROTECTIVE GLOVES: Neoprene or rubber gloves with cuffs.	EYE PROTECTION: Safety goggles with side shields
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyebath nearby	
WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.	
SECTION 8 - PHYSICAL / CHEMICAL PROPERTIES	
BOILING POINT 177° F	SPECIFIC GRAVITY (WATER = 1) 0.723
VAPOR PRESSURE (MM Hg) 47.2 mm Hg @ 20 ° C	VOLATILE ORGANIC COMPOUNDS (VOC's) 6.024 lbs / gal
VAPOR DENSITY (AIR = 1) 2.9	EVAPORATION RATE (n-Butyl Acetate = 1) > 1
SOLUBILITY IN WATER Appreciable	% VOLATILE (BY WEIGHT) 100%
APPEARANCE AND ODOR Water white liquid, characteristic alcohol odor	
SECTION 9 - STABILITY AND REACTIVITY	
STABILITY UNSTABLE: STABLE: XXX	CONDITIONS TO AVOID: Extreme temperatures, open flames, sparks
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.	
HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: XXX	CONDITIONS TO AVOID: None
SECTION 10 - DISPOSAL CONSIDERATIONS	
WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. This product may produce concentrated hazardous vapors or fumes in a disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations for ignitable materials. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.	
The information contained herein is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.	