



CHEMICAL MANUFACTURERS ASSOCIATION

Dr. M. Gilbert
International Programme on Chemical Safety
World Health Organization
CH-1211
Geneva 27 SWITZERLAND

Dear Dr. Gilbert:

The Chemical Manufacturers Association Vinyl Chloride Panel has reviewed the Vinyl Chloride International Safety Card and provides the attached comments. The hand-written comments are indicated by arrows in the left margin.

Please contact me by fax at (202) 887-1237 if you need more information or clarification on our comments.

Sincerely,

A handwritten signature in cursive script that reads 'Has Shah'.

Hasmukh C. Shah, Ph.D.
Manager, Vinyl Chloride Panel

Enclosure

VINYL CHLORIDE

ICSC: 0082

VINYL CHLORIDE*
Chloroethene
Chloroethylene
(cylinder)
 $H_2C=CHCl$
Molecular mass: 62.5

CAS # 75-01-4
RTECS # IU9625000
ICSC # 0082
UN # 1086
EC # 602-023-00-7

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Extremely flammable. Products of Combustion: • Hydrochloric Acid • Carbon Monoxide • Phosgene (small amount)	NO open flames, NO sparks, and NO smoking.	Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out (see Notes).
EXPLOSION	Gas/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting, use reduced-sparking handtools.	In case of fire: keep cylinder cool by spraying with water.
EXPOSURE		AVOID ALL CONTACT!	
■ INHALATION	Dizziness, drowsiness, headache, nausea, unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest, and refer for medical attention.
■ SKIN	ON CONTACT WITH LIQUID: FROSTBITE.	Protective gloves, protective clothing.	ON FROSTBITE: rinse with plenty of water, do NOT remove clothes.
■ EYES	Redness, pain.	Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
■ INGESTION			
SPILLAGE DISPOSAL		STORAGE	PACKAGING & LABELLING
Evacuate danger area and consult an expert in a large spillage, ventilation (extra personal protection: complete protective clothing including self- contained breathing apparatus). <i>more detail on protective clothing should be provided such as Bunker type</i>		Fireproof; cool; keep in the dark.	Special insulated cylinder. F symbol T symbol R: 45-13 S: 53-9-16-44 UN Haz Class: 2 UN Subsidiary Risks: 3
SEE IMPORTANT INFORMATION ON BACK			
ICSC: 0082		Prepared in the context of cooperation between the IPCS and the Commission of the European Communities (C) CEC, IPCS, 1988.	

I M P O R T A N T D A T A	PHYSICAL STATE: APPEARANCE COLOURLESS, COMPRESSED LIQUEFIED GAS. PHYSICAL DANGERS: The gas is heavier than air and may travel along the ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated. CHEMICAL DANGERS: The substance can under specific circumstances form peroxides, initiating explosive polymerization. The substance polymerizes readily under the influence of air, light, and heat, or in the presence of a catalyst. The substance decomposes on burning, producing toxic and corrosive gases (phosgene - see ICSC # 0007 and hydrogen chloride - see ICSC # 0163).	OCCUPATIONAL EXPOSURE LIMITS: TLV: 5 ppm; 13 mg/m³ (as TWA) A1 (ACGIH 1989-1990). ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation and through the skin. INHALATION RISK: A harmful concentration of this gas in the air will be reached very quickly on loss of containment. EFFECTS OF SHORT-TERM EXPOSURE: The substance irritates the eyes. The liquid may cause frostbite. Exposure could cause lowering of consciousness. Medical observation is indicated. EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: The substance may have effects on the liver, blood vessels, and connective tissue. This substance is carcinogenic to humans. May cause heritable genetic damage in humans.
	PHYSICAL PROPERTIES	Boiling point: -13°C Melting point: -154°C Relative density (water = 1): 0.9 Solubility in water, g/100 ml at 25°C: 0.1 Vapour pressure, kPa at 25°C: 346
ENVIRONMENTAL DATA		
NOTES May contain inhibitors (e.g., phenol). The ACGIH A1 notation indicates a confirmed human carcinogen. Depending on the degree of exposure, periodic medical examination is indicated. The odour warning when the exposure limit value is exceeded is insufficient. Do NOT use in the vicinity of a fire or a hot surface, or during welding. Turn leaking cylinder with the leak up to prevent escape of gas in liquid state. FIRE/FIRST AID/FIRE FIGHTING: In other cases extinguish with powder, carbon dioxide. Transport Emergency Card: TEC (R)- 20613 NFPA Code: H 2; F 4; R 1		
ADDITIONAL INFORMATION		
ICSC: 0082		
(C) CEC, IPCS, 1988		
VINYL CHLORIDE		