

MATERIAL SAFETY DATA SHEET

(APPROVED BY THE U.S. DEPARTMENT OF LABOR AS "essentially similar" to form OSHA-20)



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Section 1 NAME & PRODUCT		
MANUFACTURER'S NAME DOW CHEMICAL U.S.A.	CITY, STATE, ZIP CODE MIDLAND, MICHIGAN 48640	EMERGENCY PHONE NO. - 24 HOURS 517-636-4400
DATE THIS FORM WRITTEN January 4, 1973	PREPARED BY (Signature) <i>[Signature]</i>	
TRADE NAME Vinyl Chloride, Monomer	SYNONYMS 91575	

Section 2 INGREDIENTS		%	TLV (ppm)
Vinyl chloride		99	200 ppm
Phenol (in inhibited product only)		0.005	5 ppm
(Not specification values)			

Section 3 PHYSICAL DATA			
BOILING POINT (°F.)	+7.16	SOLUBILITY IN WATER	slight
VAPOR PRESSURE (mmHg at 20°C)	2524	SPECIFIC GRAVITY (H ₂ O = 1)	0.9104 20/20°C
VAPOR DENSITY (air = 1)	2.15	% VOLATILE BY VOLUME	100
APPEARANCE Colorless liquified gas-Uninhibited: faint, sweet odor; Inhibited:			

Section 4 FIRE AND EXPLOSION HAZARD DATA	
FLASH POINT (AND METHOD USED) -108.4 °F Cleveland Open Cup	FLAMMABLE LIMITS (STD. 4.1.1) 4 26
EXTINGUISHING MEDIA FOR containment of fire and protection of surrounding equipment ☒ WATER ☒ FOG ☒ FOAM ☐ ALCOHOL ☐ FOAM ☒ CO ₂ ☒ DRY CHEMICAL ☐ only	
SPECIAL FIRE FIGHTING PROTECTION EQUIPMENT AND HAZARDS Self-contained breathing apparatus. Vapors can form flammable & explosive mixtures with air at all normal ambient temperatures. All sources of ignition should be avoided in areas where vinyl chloride vapors are present.	

Section 5 REACTIVITY DATA	
STABILITY (NORMAL CONDITIONS) ☒ STABLE ☐ UNSTABLE	CONDITIONS TO AVOID Avoid exposure to air, oxygen, sunlight, heat, moisture. Ignites in air at 882°F.
INCOMPATIBILITY ☐ WATER ☐ ACID ☐ BASE ☐ CORROSIVE ☒ OXIDIZING MATERIAL ☐ OTHER	
HAZARDOUS DECOMPOSITION PRODUCTS Hydrogen chloride, carbon monoxide.	

HAZARDOUS POLYMERIZATION ☒ MAY OCCUR ☐ WILL NOT OCCUR	CONDITIONS TO AVOID Exposure to oxygen (air), sunlight, moisture & free radical initiators or other catalytic impurities.
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Section 6 SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition, supply ample ventilation, allow only properly protected personnel into the area; do not allow vinyl chloride to enter the sewer system because of explosive hazard.	
DISPOSAL METHOD: Dispose of vinyl chloride as a vapor, venting to an area free of any source of ignition.	

R&S155383

MATERIAL SAFETY DATA SHEET (CONT.)

USA, and other countries, including
MIDLAND, MICHIGAN 48640

Section 7 HEALTH HAZARD DATA

Not considered a problem because product is a gas at ambient temperatures.

EYE CONTACT

Gas - not likely to cause ill effects.

Liquid - capable of causing frostbite-type burns. Inhibitor may accumulate and cause burns.

SKIN CONTACT

Gas - not likely to cause irritation.

Liquid - capable of causing frostbite-type burns. Inhibitor, if concentrated, may be absorbed in toxic amounts.

SKIN ABSORPTION

Not absorbed through skin in pure form. Inhibitor, if concentrated, may be absorbed in toxic amounts.

INHALATION

TLV: 200 ppm (1972); Dow recommends using a guide level of 50 ppm.

EFFECTS OF OVEREXPOSURE

Lower concentration - dizziness & drunkenness, possibly lung irritation. High concentration - anesthetic effect.

FIRST AID PROCEDURES	EYE	EYES & SKIN: Flush with plenty of water for at least 15 min.; for eyes, get medical attention. Remove contaminated clothing and free of chemical before reuse. INHALATION: If person experiences ill effects, remove him to fresh air, keep him quiet & warm & get medical attention. Give artificial respiration if breathing stops. INGESTION: Not a problem. Gas at room temperature.	NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAS CONVULSIONS
	FLUSH WITH FLOWING WATER AT LEAST 15 MINUTES		

Section 8 SPECIAL PROTECTION INFORMATION

Six or more air changes per hour. Control to TLV level, or preferably to Dow's recommended industrial hygiene level.

Up to TLV - none. TLV to 2% for $\frac{1}{2}$ hour or less - full-face gas mask and canister. Greater - self-contained breathing apparatus.

EFFECT OF CLOTHING

Impervious gloves, aprons, shoes. Clean, body-covering clothing.

Rescue harness & lifeline for entering tanks or enclosed storage space.

EYE PROTECTION

☐ NOT NORMALLY NECESSARY ☐ SAFETY GLASSES WITHOUT SIDE SHIELDS ☐ SAFETY GLASSES WITH SIDE SHIELDS ☐ CHEMICAL RESISTANT GOGGLES

☒ GAS TIGHT GOGGLES OR EQUIVALENT

OTHER

☒ Eyewash stations & safety showers should be

Section 9 SPECIAL PRECAUTIONS OR OTHER COMMENTS readily available.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Storage should be in an isolated, well-ventilated area.

Pits, depressions and basements should be avoided.

Avoid all skin and eye contact, especially with inhibited product. Avoid breathing vapors. Vinyl chloride should always be handled with full recognition of its volatility and its flammability. Keep the material enclosed and eliminate all sources of ignition.