

## ETHYLENE DICHLORIDE

PAGE: 1

## MATERIAL SAFETY DATA SHEET

ACCEPTED BY O.S.H.A. AS ESSENTIALLY SIMILIAR TO O.S.H.A. FORM 20  
24-HOUR EMERGENCY TELEPHONE: 1-800-424-9300

\*\*\*\*\*

PAXTON/PATTERSON  
5719 W. 65th STREET  
CHICAGO, ILLINOIS  
60638

28 2866  
28 28 68  
28 28 70

ATTN: PURCHASING/SAFETY DEPT.

\*\*\*\*\* SECTION I-PRODUCT IDENTIFICATION \*\*\*\*\*

GENERAL OR GENERIC ID: CHLORINATED HYDROCARBON  
HAZARD CLASSIFICATION: (03) FLAMMABLE LIQUID (173.115)

\*\*\*\*\* SECTION II-HAZARDOUS COMPONENTS \*\*\*\*\*

INGREDIENT	PERCENT	TLV
ETHYLENE DICHLORIDE	99.50%	* 50 PPM

\* NIOSH RECOMMENDS A TWA OF 5 PPM WITH A PEAK EXPOSURE OF 15 PPM FOR 15 MINUTES.  
ETHYLENE DICHLORIDE IS ABSORBED THROUGH THE SKIN.

\*\*\*\*\* SECTION III-PHYSICAL DATA \*\*\*\*\*

PROPERTY	REFINEMENT	MEASUREMENT
INITIAL BOILING POINT	FOR PRODUCT	183.00 DEG F 83.88 DEG C @ 760.00 MMHG
VAPOR PRESSURE	FOR PRODUCT	62.00 MMHG @ 68.00 DEG F 20.00 DEG C
VAPOR DENSITY	AIR = 1	3.4
SPECIFIC GRAVITY		1.313 @ 77.00 DEG F 25.00 DEG C
PERCENT VOLATILES		100.00%
EVAPORATION RATE	N BU AC = 1	6.5

CONTINUED ON PAGE: 2

\*\*\*\*\* SECTION IV-FIRE AND EXPLOSION DATA \*\*\*\*\*

FLASH POINT (CLOSED CUP) 56.00 DEG F  
13.33 DEG C  
LOWER EXPLOSIVE LIMIT PRODUCT 6.2%  
EXTINGUISHING MEDIA: REGULAR FOAM OR CARBON DIOXIDE OR DRY CHEMICAL  
HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS: CARBON DIOXIDE AND CARBON MONOXIDE, HYDROGEN CHLORIDE, PHOSGENE, VARIOUS HYDROCARBONS, ETC.  
SPECIAL FIREFIGHTING PROCEDURES: SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.  
UNUSUAL FIRE & EXPLOSION HAZARDS: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

\*\*\*\*\* SECTION V-HEALTH HAZARD DATA \*\*\*\*\*

THRESHOLD LIMIT VALUE: 50 PPM; SEE SECTION II.

EFFECTS OF OVEREXPOSURE: FOR PRODUCT

-----  
EYES - CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION.

SKIN - PROLONGED OR REPEATED CONTACT CAN CAUSE MODERATE IRRITATION, DEFATTING, DERMATITIS.

BREATHING - EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONSCIOUSNESS, AND EVEN ASPHYXIATION.

SWALLOWING - CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA.

FIRST AID:

-----  
IF ON SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDER CONTAMINATED CLOTHING BEFORE RE-USE.

IF IN EYES: IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION. IF PHYSICIAN IS NOT IMMEDIATELY AVAILABLE, CONTINUE FLUSHING WITH WATER. DO NOT USE CHEMICAL ANTIDOTE.

IF SWALLOWED: GIVE TWO GLASSES OF WATER; INDUCE VOMITING IMMEDIATELY BY STICKING FINGER DOWN THROAT. CALL A PHYSICIAN. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF BREATHED: IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.

CONTINUED ON PAGE: 3

## \*\*\*\*\* SECTION VI-REACTIVITY DATA \*\*\*\*\*

HAZARDOUS POLYMERIZATION: CANNOT OCCUR

STABILITY: STABLE

INCOMPATIBILITY: AVOID CONTACT WITH: STRONG OXIDIZING AGENTS SUCH AS NITRIC ACID, PERMANGANATES, ETC., AND STRONG ALKALIES SUCH AS NAOH, NH4OH, ETC.

## \*\*\*\*\* SECTION VII-SPILL OR LEAK PROCEDURES \*\*\*\*\*

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILL: ABSORB LIQUID ON PAPER, VERMICULITE, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD.

LARGE SPILL: ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO CONTAINERS. PREVENT RUN-OFF TO SEWERS, STREAMS, OR OTHER BODIES OF WATER.

WASTE DISPOSAL METHOD:

SMALL SPILL: ALLOW VOLATILE PORTION TO EVAPORATE IN HOOD. ALLOW SUFFICIENT TIME FOR VAPORS TO COMPLETELY CLEAR HOOD DUCT WORK. DESTROY REMAINING MATERIAL BY BURNING IN AN IRON PAN.

LARGE SPILL: DESTROY BY LIQUID INCINERATION WITH OFF-GAS SCRUBBER. MATERIAL COLLECTED ON ABSORBENT MATERIAL MAY BE DEPOSITED IN A POSTED TOXIC SUBSTANCE LANDFILL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

## \*\*\*\*\* SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED \*\*\*\*\*

RESPIRATORY PROTECTION: IF TLV OF THE PRODUCT OR ANY COMPONENT IS EXCEEDED, A NIOSH/MESA JOINTLY APPROVED SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACE PIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE IS ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MESA RESPIRATORS UNDER SPECIFIED CONDITIONS. SEE YOUR SAFETY EQUIPMENT SUPPLIER.

VENTILATION: PROVIDE SUFFICIENT MECHANICAL, GENERAL AND/OR LOCAL EXHAUST, VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

PROTECTIVE GLOVES: WEAR RESISTANT GLOVES SUCH AS: NEOPRENE, BUNA-N, POLYVNYL CHLORIDE, POLYETHYLENE.

EYE PROTECTION: CHEMICAL SPLASH GOGGLES AND FACE SHIELD (8" MIN.) IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. CONSULT YOUR SAFETY EQUIPMENT SUPPLIER.

OTHER PROTECTIVE EQUIPMENT: TO PREVENT SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

## \*\*\*\*\* SECTION IX-SPECIAL PRECAUTIONS OR OTHER COMMENTS \*\*\*\*\*/\*\*\*\*\*

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUE, VAPOR, LIQUID, AND/OR SOLID, ALL HAZARD PRECAUTIONS GIVEN IN THIS DATA SHEET MUST BE OBSERVED.

THE NATIONAL CANCER INSTITUTE HAS CONCLUDED FROM THE RESULTS OF A BIOASSAY THAT ETHYLENE DICHLORIDE IS A LIVER CARCINOGEN WHEN GIVEN ORALLY TO LABORATORY TEST MICE.

OVEREXPOSURE TO MATERIAL HAS APPARENTLY BEEN FOUND TO CAUSE THE FOLLOWING EFFECTS IN LABORATORY ANIMALS: LIVER ABNORMALITIES, KIDNEY DAMAGE, EYE DAMAGE, LUNG DAMAGE, AND BLOOD ABNORMALITIES.

OVEREXPOSURE TO MATERIAL HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS: LIVER ABNORMALITIES AND KIDNEY DAMAGE.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH FABCO OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

LAST PAGE-----LAST PAGE