


 MATERIAL SAFETY
DATA SHEET
 #3159

24-HOUR EMERGENCY TELEPHONE (606) 324-1133

000823

PERCHLOROETHYLENE

PAGE: 1

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

 PRODUCT NAME: PERCHLOROETHYLENE
CAS NUMBER: 127 18 4

 MEDEX, INC.
3637 LAGON ROAD
HILLIARD, OH 43026

 05 50 006 5821880-001
DATA SHEET NO: 0001042-004
LATEST REVISION DATE: 11/85-85317
PRODUCT: 3750000
INVOICE: 506313
INVOICE DATE: 08/07/85
TO: MEDEX, INC.
6250 SHIER RINGS ROAD
DUBLIN OH 43017

ATTN: PLANT MGR./SAFETY DIR.

SECTION I-PRODUCT IDENTIFICATION

GENERAL OR GENERIC ID: CHLORINATED HYDROCARBON

HAZARD CLASSIFICATION: (99) NOT APPLICABLE

SECTION II-HAZARDOUS COMPONENTS

INGREDIENT	% (BY WT)	PEL	TLV	NOTE
PERCHLOROETHYLENE	100	100	50 PPM	(1)

(1): NIOSH RECOMMENDS A LIMIT OF 50 PPM - 8 HOUR TIME WEIGHTED AVERAGE.

SECTION III-PHYSICAL DATA

PROPERTY	REFINEMENT	MEASUREMENT
INITIAL BOILING POINT	FOR PRODUCT	250.00 DEG F (121.11 DEG C) Ø 760.00 MMHG
VAPOR PRESSURE	FOR PRODUCT	Ø 13.00 MMHG (20.00 DEG C)
VAPOR DENSITY	AIR = 1	5.7
SPECIFIC GRAVITY		1.618 - 1.622 Ø (25.00 DEG C)
PERCENT VOLATILES		100.00%
EVAPORATION RATE	(N-BUTYL ACETATE = 1)	2.80

SECTION IV-FIRE AND EXPLOSION DATA

FLASH POINT NOT APPLICABLE

EXPLOSIVE LIMIT NOT APPLICABLE

EXTINGUISHING MEDIA: WATER FOG

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS: CARBON DIOXIDE AND CARBON MONOXIDE, HYDROGEN CHLORIDE, PHOSGENE, VARIOUS HYDROCARBONS, ETC.

SPECIAL FIREFIGHTING PROCEDURES: WATER MAY BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL UNTIL FIRE IS OUT.

WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE WHEN FIGHTING FIRES.

NFPA CODES: HEALTH- 2 FLAMMABILITY- 0 REACTIVITY- 0

SECTION V-HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL	100	PPM
THRESHOLD LIMIT VALUE	50	PPM

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, AND DIARRHEA.

FIRST AID:

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

IF IN EYES: FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY, GET MEDICAL ATTENTION.


**MATERIAL SAFETY
DATA SHEET**

24-HOUR EMERGENCY TELEPHONE (606) 324-1133

000823

PERCHLOROETHYLENE

PAGE: 2

 SECTION V-HEALTH HAZARD DATA (CONTINUED)

IF SWALLOWED: DO NOT INDUCE VOMITING. CALL PHYSICIAN OR TRANSPORT TO AN EMERGENCY FACILITY.

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. DO NOT GIVE STIMULANTS. EPINEPHRINE OR EPHEDRINE MAY ADVERSELY AFFECT THE HEART WITH FATAL RESULTS.

 PRIMARY ROUTE(S) OF ENTRY:

INHALATION
SKIN CONTACT

 SECTION VI-REACTIVITY DATA

HAZARDOUS POLYMERIZATION: CANNOT OCCUR

STABILITY: STABLE

INCOMPATIBILITY: NOT APPLICABLE

 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: 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.

 WASTE DISPOSAL METHOD:

SMALL SPILL: ALLOW VOLATILE PORTION TO EVAPORATE IN HOOD. ALLOW SUFFICIENT TIME FOR VAPORS TO COMPLETELY CLEAR HOOD DUCT WORK. DISPOSE OF REMAINING MATERIAL IN ACCORDANCE WITH APPLICABLE REGULATIONS.

LARGE SPILL: DESTROY BY LIQUID INCINERATION WITH OFF-GAS SCRUBBER. CONTAMINATED ABSORBENT MAY BE DEPOSITED IN A 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/MSHA JOINTLY APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS UNDER SPECIFIED CONDITIONS. (SEE YOUR SAFETY EQUIPMENT SUPPLIER) ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

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

PROTECTIVE GLOVES: WEAR RESISTANT GLOVES SUCH AS: POLYVINYL ALCOHOL

EYE PROTECTION: CHEMICAL SPLASH GOGGLES 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 REPEATED OR PROLONGED 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 RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

THE NATIONAL CANCER INSTITUTE HAS CONCLUDED FROM THE RESULTS OF A BIOASSAY THAT PERCHLOROETHYLENE 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

OVEREXPOSURE TO MATERIAL HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS: LIVER ABNORMALITIES, KIDNEY DAMAGE, LUNG DAMAGE, BRAIN DAMAGE, SPLEEN DAMAGE

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

PERCHLOROETHYLENE

Industrial Grade

ASHLAND CHEMICAL COMPANY • DIVISION OF ASHLAND OIL, INC.
BOX 2219, COLUMBUS, OHIO 43216 • (614) 889-3333

DATE: May 1979

PERCHLOROETHYLENE, INDUSTRIAL GRADE

SPECIFICATIONS

Specific Gravity 25 ^o /25 ^o C (D-2111)	1.617-1.621
Specific Gravity 20 ^o /20 ^o C (D-2111)	1.623-1.627
Color, Pt-Co, max (D-2108)	15
Distillation Range, ^o C (D-1078)	120 122 ^o C
Acidity, % by wt, as HCl, max (D-2989)	0.0005
Alkalinity, % by wt, as NaOH, max (D-2989)	0.005
Nonvolatile Matter, % by wt, max (D-2109)	0.0025
Cloud Point, ^o C, max	0

SHIPPING DATA:

Pounds Per Gallon, 25 ^o C	13.55
Freezing Point, ^o C	-22.4
Viscosity, cps, 25 ^o C	0.84
Flash Point	None
Fire Point	None
DOT Label Required	None

NOTICE: All precautionary labels and notices should be read and understood by all supervisory personnel and employees before using. Consult Ashland Chemical Company and OSHA regulations for additional safety and health information. Purchaser is responsible for complying with all applicable federal, state or local laws and regulations covering use of the product. Special attention should be given to consumer applications.

() Indicates ASTM test procedure

CODE: 37500000

C. A. S. No. 127-18-4