

ASHLAND CHEMICAL, INC. SUBS. OF ASHLAND OIL, INC. -- TRICHLOROETHANE 111 DEGREASE
COLD/VAPOR -- 6810-00-664-0388

===== Product Identification =====

Product ID:TRICHLOROETHANE 111 DEGREASE COLD/VAPOR

MSDS Date:07/14/1989

FSC:6810

NIIN:00-664-0388

MSDS Number: BQNQT

=== Responsible Party ===

Company Name:ASHLAND CHEMICAL, INC. SUBS. OF ASHLAND OIL, INC.

Box:2219

City:COLUMBUS

State:OH

ZIP:43216

Country:US

Info Phone Num:614-790-3333

Emergency Phone Num:800-274-5

263

CAGE:5A188

=== Contractor Identification ===

Company Name:ASHLAND CHEMICAL CO

Address:5200 PAUL BLAZEL MEMORIAL PARKWAY

Box:City:DUBLIN

State:OH

ZIP:43017

Country:US

Phone:614-889-4505

CAGE:5A188

===== Composition/Information on Ingredients =====

Ingred Name:METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE) (SARA III)

CAS:71-55-6

RTECS #:KJ2975000

Fraction by Wt: >95%

OSHA PEL:350 PPM/450 STEL

ACGIH TLV:350 PPM/450STEL;9293

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ozone Depletin

g Chemical:1

Ingred Name:1,4-DIOXANE (DIETHYLENE DIOXIDE) (SARA III)

CAS:123-91-1

RTECS #:JG8225000

Fraction by Wt: 2.5%

OSHA PEL:S, 100 PPM

ACGIH TLV:S, 25 PPM; 9293

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50 (RAT) = 10300 MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:ACUTE: MAY CAUSE EYE & SK

IN

IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CENTRAL NERVOUS SYSTEM DEPRESSANT. LOSS OF CONSCIOUSNESS AND EVEN DEATH CAN OCCUR AT HIGH LEVELS OF EXPOSURE.

Explanation of Carcinogenicity:1,4-DIOXANE IS LISTED AS AN ANIMAL CARCINOGEN BY NTP AND IARC.

Effects of Overexposure:INCOORDINATION AND IMPAIRED JUDGMENT MAY OCCUR AT VAPOR EXPOSURES FROM 500-1000 PPM. DIZZINESS, DROWSINESS, AND GENERAL ANESTHETIC EFFECTS MAY OCCUR IN RANGES OF 1000 PPM AND HIGHER.

Medica

I Cond Aggravated by Exposure:INCREASED SENSITIVITY TO ADRENALIN MAY BE CAUSED BY OVER EXPOSURE.

===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR.

IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. EYE:

FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. GET MEDICAL AT TENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER PROMPTLY. INGESTION: DO NOT IND

UCE VOMITING. GIVE

MILK OR USP MINERAL OIL. GET IMMEDIATE MEDICAL ATTENTION.

===== Fire Fighting Measures =====

Lower Limits:7.5%

Upper Limits:15.0%

Extinguishing Media:WATER FOG

Fire Fighting Procedures:WATER MAY BE USED TO KEEP FIRE-EXPOSED

CONTAINERS COOL UNTIL FIRE IS OUT. WEAR SCBA WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE.

Unusual Fire/Explosion Hazard:NEFER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM BECAUSE PR

ODUCT CAN IGNITE EXPLOSIVELY(EVEN JUST RESIDUE)

===== Accidental Release Measures =====

Spill Release Procedures:SMALL SPILL: WIPE UP WITH RAGS OR TOWELS.
LARGE SPILLS: WEAR NIOSH APPROVED RESPIRATOR. VENTILATE AREA. DIKE
TO RETAIN FLUID. PUMP UP FREE LIQUID. RESIDUE WILL EVAPORATE
QUICKLY. DO NOT FLUSH TO SEWER OR WATERWAY.

Neutralizing Agent:NONE

===== Handling and Storage =====

Handling and Storage Precautions:STO
RE IN A COOL, DRY, WELL-VENTILATED
LOCATION, AWAY FROM ANY AREA WHERE THE FIRE HAZARD MAY BE ACUTE.
KEEP CONTAINERS CLOSED WHEN NOT IN USE.

Other Precautions:DO NOT USE WITH ALUMINUM. READ AND FOLLOW DIRECTIONS
ON LABEL. DO NOT REUSE CONTAINERS.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IN HIGH VAPOR AREA, USE NIOSH/MSHA APPROVED
RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE. USE SELF-CONTAINED
BREATHING APPARATUS IF VAPOR LEVELS E
XCEED 1000 PPM.

Ventilation:LOCAL EXHAUST RECOMMENDED TO CONTROL VAPORS BELOW 50% OF
TLV.

Protective Gloves:NEOPRENE, PVA GLOVES RECOMMENDED.

Eye Protection:USE CHEMICAL SAFETY GOGGLES.

Other Protective Equipment:APRON AND WORK CLOTHING TO MINIMIZE
EXPOSURE. EYE WASH STATION & SAFETY SHOWER RECOMMENDED.

Work Hygienic Practices:WASH THOROUGHLY AFTER USE AND BEFORE EATING,
SMOKING OR USING TOILET FACILITIES. DO NOT BREATH VAPORS OR MIST.

Supplemental Safety and Health

TARGET ORGANS ARE

SKIN, CNS, CVS, AND EYES

===== Physical/Chemical Properties =====

HCC:T4

Boiling Pt:B.P. Text:161F,72C

Vapor Pres:100 MM HG

Vapor Density:4.5(AIR=1)

Spec Gravity:1.3-1.324

Evaporation Rate & Reference:2.6 (ETHLY ETHER=1)

Appearance and Odor:HOMOGENEOUS SOLUTION THAT IS CLEAR. APHA COLOR 15
MAX.

Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

WATER, REACTIVE META

LS SUCH AS ALUMINUM AND MAGNESIUM.

Stability Condition to Avoid: OPEN FLAMES, WELDING ARCS, RESISTANCE HEATERS, ETC., WHICH CAN RESULT IN THERMAL DECOMPOSITION.

Hazardous Decomposition Products: WHEN INVOLVED IN FIRE, 1,1,1-TRICHLOROETHANE EMITS HIGHLY TOXIC AND IRRITATING HYDROGEN CHLORIDE AND PHOSGENE FUMES.

===== Disposal Considerations =====

Waste Disposal Methods: DISPOSE OF I/A/W FEDERAL, STATE & LOCAL REGULATIONS

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