

ASHLAND CHEMICAL CO. -- TRICHTHLORETHAN 111 DEGRS COLD/V -- 6810-00-551-1487

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

Product ID:TRICHTHLORETHAN 111 DEGRS COLD/V
MSDS Date:07/14/1989
FSC:6810
NIIN:00-551-1487
MSDS Number: BHFQV
=== Responsible Party ===
Company Name:ASHLAND CHEMICAL CO.
Address:INDUSTRIAL CHEMICALS AND SOLVENTS
Box:2219
City:COLUMBUS
State:OH
ZIP:43216
Country:US
Info Phone Num:614-790-333

3
Emergency Phone Num:606-324-1133

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-TRICHTHLORETHANE) (SARA III)
CAS:71-55-6
RTECS #:KJ2975000
Fraction by Wt: >95%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:350 PPM
ACGIH TLV:350 PPM/450STEL;9394

EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS
Ozone Depleting Chemical:1

Ingrid Name:1,4-DIOXANE (DIETHYLENE DIOXIDE) (SARA III)
CAS:123-91-1
RTECS #:JG8225000
Fraction by Wt: 2.5%
Other REC Limits:NONE SPECIFIED
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:LD50 (ORAL RAT) IS >10,000 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenic
ity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE-EYES:SLIGHT IRRITATION &
INJURY.SKIN:IRRITATION.INHALATION:RESPIRATORY IRRITATION,CNS
EFFECTS & POSSIBLE DEATH.INGESTION:ORAL TOXICITY IS LOW.ASPIRATION
OF MATERIAL INTO THE LUNGS CAN CAUSE CHEM ICAL PNEUMONITIS WHICH
CAN BE FATAL.CHRONIC-OVEREXPOSURE CAUSES KIDNEY DAMAGE, CARDIAC &
LIVER ABNORMALITIES.SKIN:FLAKES
Explanation of Carcinogenicity:THIS PRODUCT CONTAINS PROPRIETARY
INHIBITOR (DIETHYLENE ETHER)
R)WHICH IS LISTED BY IARC, NTP AS ANIMAL
CARCINOGEN.
Effects of Overexposure:EYES:LIQUID MAY CAUSE PAIN, VAPOR MAY CAUSE
IRRITATION.SKIN:IRRITATION.INHALATION:MAY CAUSE
DIZZINESS,WEAKNESS,FATIGUE,NAUSEA,HEADACHE & UNCONSCIOUSNESS &
DEATH.INGESTION:MAY BE ASPIRATED INTO THE LUN GS AND RESULTING IN
INJURY TO OTHER BODYSYSTEMS.
Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF AILMENTS
OR WITH A PRE-EXISTING DISEASE INVOLVING THE EYES, SKIN, OR
RESPIRATORY TR
ACT MAY BE AT INCREASED RISK FROM EXPOSURE.

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

First Aid:INHALATION:REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING.
GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER
FOR 15 MINUTES HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.
SKIN:REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF
IRRITATION PERSISTS, GET MEDICAL ADVICE. INGESTION:DO NOT INDUCE
VOMITING. GIVE NOTHING BY MOUTH IF

UNCONSCIOUS. GET IMMEDIATE
MEDICAL ATTENTION.

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

Lower Limits:7.5

Upper Limits:15.0

Extinguishing Media:USE WATER FOG

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS WITH A
FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN
FIGHTING FIRES.

Unusual Fire/Explosion Hazard:NEVER USE WELDING OR CUTTING TORCH ON OR
NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT CAN IGNITE
EXPLOSIVELY.VAPORS

ARE HEAVIER THAN AIR.AVOID SPARKS,EXCE.
HEAT,FLAME

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

Spill Release Procedures:PERSONS NOT WEARING PROTECTIVE EQUIPMENT
SHOULD BE EXCLUDED FROM AREA OF SPILL.PUMP LIQUID TO SALVAGE
TANK.REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY,FLOOR ABSORBENT
AND SHOVELED INTO CONTAINERS.I F IT RUN-OFF TO SEWERS, NOTIFY
PROPER AUTORITIES.

Neutralizing Agent:NOT APPLICABLE.

===== Handling and Storage ==

=====

Handling and Storage Precautions:ALUMINUM EQUIPMENT SHOULD NOT BE USED
FOR STORAGE/TRANSFER(PUMPS,MIXERS,FITTINGS,STORAGE
TANKS,ETC).CONTACT WITH ALUMINUM PARTS->VIOLENT REACTIONS.

Other Precautions:AVOID PROLONGED CONTACT WITH PLASTIC & RUBBER I.E.
EQUIPMENT,PROTECTIVE CLOTHING, AND CONTAINERS.THIS PRODUCT SHOULD
NOT BE PACKED IN ALUMINUM AEROSOL CAN.

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

Respiratory Protection:USE NIOSH/MSHA
APPROVED RESPIRATOR FOR ORGANIC

VAPORS OR AS REQUIRED IF ABOVE PEL/TLV OR SCBA IN AN ENCLOSED AREA.

Ventilation:LOCAL/GENERAL TO MAINTAIN PEL/TLV.

Protective Gloves:POLYVINYL ALCOHOL, POLYETHYLENE

Eye Protection:SAFETY GOGGLES WITH OPTIONAL FACE SHIELD

Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER,WORK
CLOTHING AND APRON AS REQUIRED.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR
FO

OTWEAR.

Supplemental Safety and Health

NOTE TO PHYSICIAN:DUE TO RAPID ABSORPTION THROUGH THE LUNGS IF
ASPIRATED WHILE VOMITING,THE DANGER MUST BE WEIGHED AGAINST
TOXICITY OF 1,1,1-TRICHLOROETHANE.ENDOTRACHEAL/ESOPHAGEAL CONTROL
MAY BE SUGG ESTED.DO NOT ADMINISTER
SYMPATHOMIMETICDRUGS.EPINEPHRINE OR EPHEDRINE MAY ADVERSELY AFFECT
THE HEART WITH FATAL RESULTS

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

HCC:T4

Boiling Pt:B.P. Text:162F,72C

Vapor Pres:1

00 MMHG

Vapor Density:4.5

Spec Gravity:1.3-1.324

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

Solubility in Water:NONE NOTED

Appearance and Odor:CLEAR LIQUID, APHA COLOR 15 MAX

Percent Volatiles by Volume:100.0

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS,WATER,ALUMINUM,MAGNESIUM

Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES

Hazardous Decomposition Products:CARBON MONOXIDE

, CARBON

DIOXIDE,HCL,PHOSGENE AND OTHER UNIDENTIFIED COMPONENTS.

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

Waste Disposal Methods:CONSULT LOCAL AUTHORITIES.DISPOSAL MUST BE MADE
IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND
REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner wh

atsoever,

expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.