

DOW CHEMICAL U S A GOVERNMENT MARKETING -- 1,1,1-TRICHLOROETHANE,INHIBITED --
6810-00-476-5612

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

Product ID:1,1,1-TRICHLOROETHANE,INHIBITED

MSDS Date:05/12/1989

FSC:6810

NIIN:00-476-5612

MSDS Number: BDZTH

=== Responsible Party ===

Company Name:DOW CHEMICAL U S A GOVERNMENT MARKETING

Address:2020 DOW CENTER

City:MIDLAND

State:MI

ZIP:48640-6030

Country:US

Info Phone

Num:517-636-4400

Emergency Phone Num:517-636-4400

CAGE:71981

=== Contractor Identification ===

Company Name:CHEMICAL SPECIALISTS AND DEVELOPMENT INC

Address:2210 HACKBERRY LN

Box:687

City:CONROE

State:TX

ZIP:77305

Country:US

Phone:409-756-1065

CAGE:4N760

Company Name:DOW CHEMICAL CO

Address:100 LARKIN CENTER

Box:City:MIDLAND

State:MI

ZIP:48674

Country:US

Phone:800-258-2436

CAGE:96717

Company Name:DOW CHEMICAL U S A

Address:BARSTOW BLDG

City:MIDLAND

State:MI

ZIP:48640

Country:US

Phone:517-636-44

00
CAGE:71981

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

Ingred Name:METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE) (SARA III)
CAS:71-55-6
RTECS #:KJ2975000
Fraction by Wt: 96.5%
Other REC Limits:NONE SPECIFIED
OSHA PEL:350 PPM/450 STEL
ACGIH TLV:350 PPM/450 STEL;9192
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS
Ozone Depleting Chemical:1

Ingred Name:1,4-DIOXANE (DIETHYLENE DIOXIDE) (SARA III)
CAS:123-91-1
RTECS #:JG8225000
Fraction by Wt: 2.5%
Other REC Limits:NONE SPECIFIED
D
OSHA PEL:S, 100 PPM
ACGIH TLV:S, 25 PPM; 9293
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:1,2-BUTYLENE OXIDE (SARA III)
CAS:106-88-7
RTECS #:EK3675000
Fraction by Wt: 0.47%
Other REC Limits:NONE SPECIFIED
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:NITROMETHANE
CAS:75-52-5
RTECS #:PA9800000
Fraction by Wt: 0.34%
Other REC Limits:NONE SPECIFIED
OSHA PEL:100 PPM
ACGIH TLV:100 PPM; 9192

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

LD50 LC50 Mixture:ORAL LD50

(RAT) IS >10,000 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:PRODUCT IS IRRITATING TO BODY TISSUES, AND IS A CENTRAL NERVOUS SYSTEM DEPRESSANT, CAUSING NAUSEA AND DIZZINESS. CHRONIC OVER EXPOSURE MAY CAUSE DERMATITIS, LIVER AND/OR KIDNEY DAMAGE.

Explanation of Carcinogenicity:1,4-DIOXANE IS LISTED AS A CARCINOGEN BY IARC, NTP. TESTED AS A MIXTURE, THE PRODUCT SHOWED NO

CARCINOGENICITY.

Effects of Overexposure:HEADACHE, DIZZINESS, DROWSINESS, NAUSEA, TINGLING OR NUMBNESS OF THE EXTREMITIES, SENSES OF FULLNESS IN THE HEAD, SENSE OF WARMTH, STUPOR OR DULLNESS, LETHARGY AND DRUNKENNESS. VERY HIGH CONCENTRATION S MAY LEAD TO UNCONSCIOUSNESS OR EVEN DEATH IN CONFINED OR POORLY VENTILATED AREAS.

Medical Cond Aggravated by Exposure:NONE GIVEN BY MANUFACTURER.

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

First Aid:EYE:FLUSH W/

WATER 15 MIN, HOLD LIDS OPEN. SKIN:WASH WITH

SOAP & WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE. INHALED:REMOVE TO FRESH AIR. RESTORE BREATHING IF NECESSARY. INGESTED:DO NOT INDUCE VOMITING. GIVE 2 LARGE GLASSES OF MILK OR WATER AND GET IMMEDIATE MEDICAL CARE. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. IF IRRITATION PERSISTS OR IS SEVERE,SEE A DOCTOR.

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

Flash Point Method:TCC

Flash Point

:NON-FLAMMABLE

Lower Limits:7.5

Upper Limits:12.5

Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS DECOMPOSITION PRODUCTS. PRODUCT WILL FORM FLAMMABLE MIXTURES IN CONFINED & POORLY

VENTILATED AREAS.

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

Spill Release Procedures:SMALL SPILL: WIPE UP WITH RAGS OR TOWELS.
VENTILATE AREA. RESIDUE WILL EVAPORATE QUICKLY. DO NOT FLUSH TO
SEWER OR WATERWAY.
Neutralizing Agent:NONE

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

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL-VENTILATED
LOCATION, AWAY FROM ANY AREA WHERE THE FIRE HAZARD MAY BE ACUTE.
KEEP CONTAINER
S CLOSED WHEN NOT IN USE.
Other Precautions:VAPORS ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW
AREAS. DO NOT ENTER WHERE VAPORS ARE SUSPECTED WITHOUT SELF
CONTAINED BREATHING APPARATUS AND AN OBSERVER.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR
OR RESPIRATOR FOR ORGANIC VAPOR IF EXPOSURE IS ABOVE THE TLV/PEL.
IF EXPOSED ABOVE 1000 PPM USE ONLY A SUPPLIED AIR RESPIRATOR. SEE
29 C
FR 1910.134 FOR REGULATIONS PERTAINING TO RESPIRATOR USE
Ventilation:NORMAL ROOM VENTILATION IS SUFFICIENT. SUPPLEMENT WITH
LOCAL EXHAUST IF PEL/TLV IS EXCEEDED.
Protective Gloves:NEOPRENE, PVA GLOVES RECOMMENDED.
Eye Protection:SAFETY GLASSES OR SPLASH GOGGLES
Other Protective Equipment:APRON AND WORK CLOTHING TO MINIMIZE
EXPOSURE. EYE WASH STATION & SAFETY SHOWER RECOMMENDED.
Work Hygienic Practices:USE GOOD CHEMICAL HYGIENE PRACTICE. AVOID
UNNECESSARY CONTACT. WASH THOROUGHLY BE
FORE EATING OR DRINKING.
Supplemental Safety and Health
TARGET ORGANS ARE SKIN, CNS, CVS, AND EYES.

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

HCC:T4
Boiling Pt:B.P. Text:165F,74C
Vapor Pres:100 MM
Vapor Density:4.55
Spec Gravity:1.321
Solubility in Water:0.07%
Appearance and Odor:CLEAR, COLORLESS LIQUID,IRRITATING ODOR
Percent Volatiles by Volume:100%

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

Stability Indicator/Materials to Avoid:YES
WATE

R AND ALUMINUM STORAGE CONTAINERS WILL DETERIORATE THE MATERIAL.
POWDERED REACTIVE METALS SUCH AS ALUMINUM OR ZINC.

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

Hazardous Decomposition Products:WHEN INVOLVED IN FIRE, PRODUCT EMITS
HIGHLY TOXIC AND IRRITATING FUMES OF HYDROGEN CHLORIDE AND
PHOSGENE.

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

Waste Disposal Methods:DISPOSE I/A/W ALL FEDERAL, STATE AND LOCAL
REGULATIONS
. MANUFACTURER SUGGESTS RECYCLE (PREFERRED) OR
INCINERATE.

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