

MALLINCKRODT INC. SCIENCE PRODUCTS DIVISION -- TETRACHLORIDE ETHYLENE
(TETRACHLOROETHENE) -- 6810-01-013-2541

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

Product ID:TETRACHLORIDE ETHYLENE (TETRACHLOROETHENE)

MSDS Date:04/06/1995

FSC:6810

NIIN:01-013-2541

MSDS Number: BQGQT

=== Responsible Party ===

Company Name:MALLINCKRODT INC. SCIENCE PRODUCTS DIVISION

Address:PARIS BYPASS

Box:M

City:PARIS

State:KY

ZIP:4

0361

Country:US

Info Phone Num:314-539-1600

Emergency Phone Num:314-539-1600/314-982-5000

CAGE:62910

=== Contractor Identification ===

Company Name:ATLAS CHEMICAL

Box:UNKNOW

CAGE:6D478

Company Name:MALLINCKRODT SPECIALTY CHEMICALS CO

Address:222 RED SCHOOL LANE

Box:City:PHILLIPSBURG

State:NJ

ZIP:08865

Country:US

Phone:908-859-2151

CAGE:62910

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

Ingred Name:PERCHLOROETHYLENE (TETRACHLOROETHYLENE) (SARA III)

CAS:127-18-4

RTECS #:

KX3850000
Fraction by Wt: 100%
OSHA PEL:100 PPM
ACGIH TLV:25PPM/100,A3 STEL;94
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

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

LD50 LC50 Mixture:LD50:(ORAL,RAT) = 8850 MG/KG.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:TETRACHLOROETHYLENE IS IRRITATING TO
BODY TISSUES. IT PRODUCES DERMATITIS VIA DEFATTING AND INHALATION
PRODU
CES SYMPTOMS OF INTOXICATION. IT IS OF LOW ORAL TOXICITY DUE
TO ITS INSOLUBILITY. CHRONIC O VEREXPOSURE MAY CAUSE LIVER,
KIDNEY, CENTRAL NERVOUS SYSTEM DAMAGE.
Explanation of Carcinogenicity:TETRACHLOROETHYLENE IS LISTED AS A
CARCINOGEN BY NTP & IARC. SEE INDIVIDUAL REPORTS FOR DETAILS.
Effects of Overexposure:EYE:PAIN, TEARING. SKIN:DEFATTING AND DRYING,
LEADING TO DERMATITIS. INHALED:RESPIRATORY IRRITATION, GIDDINESS,
HEADACHE, INTOXICATION, NAUSEA, VOMITING. INGESTED:A
BDOMINAL PAIN,
NAUSEA, HEADACHE, DIZZINESS.
Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN
DISORDERS, EYE PROBLEMS, OR IMPAIRED KIDNEY FUNCTION MAY BE MORE
SUSCEPTIBLE TO EFFECTS OF SUBSTANCE. USE OF ALCOHOLIC BEVERAGES
ENHANCES TOXIC EFFECTS OF EXPOSURE.

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

First Aid:EYE:FLUSH W/WATER 15 MIN, HOLD LIDS OPEN. SKIN:REMOVE
CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE. WASH WITH SOAP &
WATER. INHALED:REMOVE TO FRESH AIR. RESTORE/AID BREATHING AS
NEEDED. INGESTED:IMM EDIATELY GIVE 2 LARGE GLASSES OF MILK OR WATER
AND INDUCE VOMITING. (NOTHING BY MOUTH IF UNCONSCIOUS.) GET
IMMEDIATE MEDICAL CARE. IF ANY IRRITATION PERSISTS OR IS SEVERE,
SEE A DOCTOR.

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

Flash Point:NON-FLAMMABLE
Extinguishing Media:USE ANY MEANS SUITABLE FOR EXTINGUISHING
SURROUNDING FIRE.
Fire Fighting Procedures:WEAR NIOS

H APPROVED PRESSURE DEMAND SCBA &
FULL PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:NOT CONSIDERED TO BE AN EXPLOSION HAZARD.
THERMO-OXIDATIVE REACTIONS CAN PRODUCE HIGHLY TOXIC PHOSGENE OR
HYDROGEN CHLORIDE.

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

Spill Release Procedures:WEAR PROTECTIVE CLOTHING & RESPIRATORY
PROTECTION. CONTAIN & RECOVER LIQUID WHEN POSSIBLE. ALTERNATIVELY,
ABSORB W/VERMICULITE, DRY SAND, EARTH, SIMILAR MATERIAL. SCOOP
INTO
CONTAINERS FOR DISPOSAL. DO NOT FLUSH TO SEWER.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN COOL, DRY, VENT AREA AWAY
FROM SOURCES OF HEAT/IGNITION. ISOLATE FROM FLAMMABLE MATERIALS.
PROTECT FROM DIRECT SUNLIGHT.
Other Precautions:NONE

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

Respiratory Protection:IF TLV EXCEEDED,FULL FACEPIECE CHE
M CARTRIDGE
RESPIRATOR MAY BE WORN UP TO 100X TLV. ALTERNATIVELY, SUPPLIED AIR
FULL FACEPIECE RESPIRATOR OR AIRLINED HOOD MAY BE WORN.
Ventilation:SYSTEM OF LOCAL &/OR GENERAL EXHAUST RECOMMENDED TO KEEP
EXPOS BELOW AIRBORNE EXPOSURE LIMIT.
Protective Gloves:PROTECTIVE GLOVES
Eye Protection:CHEMICAL SAFETY GOGGLES
Other Protective Equipment:BODY-COVERING CLOTHING. MAINTAIN EYE WASH
FOUNTAIN & QUICK-DRENCH FACILITIES IN WORK AREA.
Work Hygienic Practices:MFR: ? HMIS:USE GOOD CHEMI
CAL HYGIENE
PRACTICE. AVOID UNNECESSARY CONTACT. WASH THOROUGHLY BEFORE EATING
OR DRINKING.
Supplemental Safety and Health
KEY2:KT MSDS RECEIVED FROM NAVY (FOCAL POINT N). CAGE CODE AND NSN
IDENTIFIED BY THEM.

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

HCC:T4
NRC/State Lic Num:NONE
Boiling Pt:B.P. Text:>246F,>119C
Melt/Freeze Pt:M.P/F.P Text:-8F,-22C
Vapor Pres:16 MM
Vapor Density:5.83
Spec Gravity:1.63
Evaporation Rate & Reference:(CCL4=1) 0.27
Solu

bility in Water:0.015 G/100 G WATER

Appearance and Odor:CLEAR, COLORLESS LIQUID, ETHEREAL ODOR.

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZERS, STRONG ALKALIES, ESPECIALLY NAOH, KOH; FINELY DIVIDED METALS, ESPECIALLY ZINC.

Stability Condition to Avoid:STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE.

Hazardous Decomposition Products:CO2 AND CO MAY FORM WHEN HEATED TO DECOMPOSITION.

Conditions to Avo

id Polymerization:THIS SUBSTANCE DOES NOT POLYMERIZE.

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

Waste Disposal Methods:BURN IN APPROVED INCINERATOR WITH APPROPRIATE SCRUBBER. ENSURE COMPLIANCE W/LOCAL, STATE AND FEDERAL REGULATIONS.

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