

MALLINCKRODT INC -- TETRAHYDROFURAN -- 6810-01-311-2543

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

Product ID:TETRAHYDROFURAN

MSDS Date:04/06/1989

FSC:6810

NIIN:01-311-2543

MSDS Number: BPZWM

=== Responsible Party ===

Company Name:MALLINCKRODT INC

Box:M

City:PARIS

State:KY

ZIP:40361-0315

Country:US

Info Phone Num:314-982-5000

Emergency Phone Num:314-982-5000

CAGE:1BF21

=== Contractor Identification ===

C

Company Name:MALLINCKRODT INC., SCIENCE PRODUCTS DIV

Box:M

City:PARIS

State:KY

ZIP:40361-0315

Country:US

Phone:314-982-5000

CAGE:1BF21

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

Ingred Name:TETRAHYDROFURAN (SARA III)

CAS:109-99-9

RTECS #:LU5950000

Fraction by Wt: 100%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:200 PPM/250 STEL

ACGIH TLV:200 PPM/250STEL;9293

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:LDLO ORAL RAT=3000MG/KG;PEL=200PPM(TWA)

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

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

Health Hazards Acute and

Chronic:INHAL:ANETHETIC,IRRITANT.INGEST:IRRITATING TO THE MUCOUS MEMBRANES.MAY CAN LIVER OR KIDNEY

DAMAGE.SKIN:IRRITANT.EYES:IRRITANT. CHRONIC-NO DATA.

Explanation of Carcinogenicity:RTECS(92-3) CITES MUTAGENIC STUDIES.

Effects of Overexposure:INHAL:HEADACHE,IRRITATION OF THE NOSE AND THRA

OT,DISSINESS.INGEST:SORE THROAT AND ABDOMINAL PAIN.SKIN:REDENSS AND PAIN.

Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN OR EYE PROBLEMS,IMPAIRED LIVER OR KIDNEY FUNCTIONS.

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

First Aid:INHAL:REMOVE TO FRESH AIR.RESTORE OR ASSIST BREATHING IF NEEDED.CALL PHYSICIAN.INGEST:GET IMMEDIATE MEDICAL HELP.IF NOT AVAILABLE(AND CONSCIOUS),GIVE 2 GLASSES OF WATER,INDUCE VOMITING WITH FINGER DOW N THOAT(KEEP HEAD

LOWER THAN HIPS).SKIN:REMOVE

CONTAMINATED CLOTHING.FLUSH WITH WATER FOR 15 MINUTES.EYES:FLUSH WITH WATER,HOLDING LIDS OPENED.GET IMMEDIATE MEDICAL HELP.

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

Flash Point Method:COC

Flash Point:6F,-14C

Autoignition Temp:Autoignition Temp Text:610F

Lower Limits:1.8

Upper Limits:11.8

Extinguishing Media:DRY CHEMICAL,FOAM OR CARBON DIOXIDE.WATER SPRAY CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.

Fire Fighting Procedures:US

E FULL PROTECTIVE CLOTHING AND A SCBA IN

POSITIVE PRESSURE MODE.USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Unusual Fire/Explosion Hazard:EXPLOSIVE ORGANIC PEROXIDES FORM FROM

AGING OR LIGHT.VAPOR CAN TRAVEL DISTANCES ALONG THE FLOOR AND FLASH BACK TO THE IGNITION SOURCE.

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

Spill Release Procedures:VENTILATE AREA.REMOVE SOURCES OF IGNITION.USE PROTECTIVE CLOTHING AND RESPIRATOR.USE NON-SPARKING EQUIP

MENT.ADBSORB LIQUID WITH VERMICULITE, DRY SAND...PLACE IN AN APPROPRIATE CONTAINER FOR DISPOSAL.

Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:KEEP CONTAINER CLOSED,AWAY FROM LIGHT,HEAT AND OXIDIZERS.

Other Precautions:NONE.

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

Respiratory Protection:1-FULL FACEPIECE WITH CHEMICAL CARTRIDGE RESPIRATOR.2-SCBA WITH FULL FACEPIECE OR AIR-LINED HOOD.

Ventilation:LOCAL(PREFERRED,BECAUSE IT CAN CONTROL THE EMISION OF CONTAMINANTS) AND/OR GENERAL(MECHANICAL) EXHAUST.

Protective Gloves:RUBBER OR NEOPRENE

Eye Protection:SAFETY GOGGLES AND/OR SPLASH SHIELD

Other Protective Equipment:IMPERVIOUS BOOTS,APRON,COVERALLS.EYE WASH STATION AND QUICK DRENCH SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:DO NOT WEAR CONTACT LENSES.WASH HANDS.KEEP FOOD OUT OF THE WORK AREA.USE PRUDENT HYGENIC AND SANITARY PRACTICES.

Supple
mental Safety and Health
NONE.

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

HCC:F2

Boiling Pt:B.P. Text:151F,66C

Vapor Pres:114MM 259F

Vapor Density:2.5

Spec Gravity:0.88

Evaporation Rate & Reference:14.5

Solubility in Water:MISCIBLE

Appearance and Odor:LIQUID,MOBILE;COLORLESS;ETHER-LIKE ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES
OXYGEN.

Stability Condition to

Avoid: LIGHT. KEEP CONTAINERS CLOSED; CONCENTRATION OF PEROXIDES (BY DISTILLATION, EVAPORATION) CREATES EXPLOSION HAZARD.

Hazardous Decomposition Products: IRRITATING AND TOXIC FUMES (EG. CARBON MONOXIDE).

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

Waste Disposal Methods: COLLECT AS HAZARDOUS WASTE, LABEL AND DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL 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 whatsoever, 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.