

VAN WATERS & ROGERS INC -- P1546, TETRAHYDROFURAN -- 6810-00-982-8496

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Product Identification
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Product ID:P1546, TETRAHYDROFURAN

MSDS Date:05/04/1990

FSC:6810

NIIN:00-982-8496

MSDS Number: BPMJC

=== Responsible Party ===

Company Name:VAN WATERS & ROGERS INC

Address:1600 NORTON BLDG

City:SEATTLE

State:WA

ZIP:98104-1564

Country:US

Info Phone Num:408-435-8700

Emergency Phone Num:800-424-

9300(CHEMTREC)

CAGE:DO735

=== Contractor Identification ===

Company Name:VAN WATERS & ROGERS SUBSIDIARY OF UNIVAR

Address:6100 CARILLON POINT

City:KIRKLAND

State:WA

ZIP:98033

Country:US

Phone:425-889-3400

CAGE:DO735

Company Name:VAN WATERS AND ROGERS INC., UNIVAR CORP.

Address:1600 NORTON BLDG. 801 2ND AVENUE

Box:City:SEATTLE

State:WA

ZIP:98104-1564

Country:US

Phone:206-447-5911/800-424-9300(CHEMTREC)

CAGE:87664

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Composition/Information on Ingredients
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Ingred Name:F

URAN, TETRAHYDRO-; (TERAHYDROFURAN)

CAS:109-99-9

RTECS #:LU5950000

Fraction by Wt: >99%

OSHA PEL:200PPM;250 PPM STEL

ACGIH TLV:200PPM;250 PPM STEL

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:INHIBITOR

Other REC Limits:NONE SPECIFIED

Ingred Name:FIRST AID PROC:DO NOT GIVE ANYTHING BY MOUTH TO AN UNCON OR
CONVULSING PERSON.

RTECS #:9999999ZZ

Ingred Name:SPILL PROC: ORG VAP MAY BE SATIS. IN ANY EVENT, ALWAYS WEAR
EYE PROT. EXTING ALL IGNIT SOURCES & ENSURE THAT ALL (ING 5)

RTEC

S #:9999999ZZ

Ingred Name:ING 4:HNDLG EQUIP IS ELECTRICALLY GROUNDED. FOR SM
SPILLS/DRIPS, MOP/WIPE UP & DISPOSE OF IN DOT-APPRVD WASTE (ING 6)

RTECS #:9999999ZZ

Ingred Name:ING 5:CONTR. FOR LG SPILLS, CNTN BY DIKING W/SOIL/OTHER
NON-COMBUSTIBLE ABSORB MATL & THEN PUMP INTO DOT-APPRVD (ING 7)

RTECS #:9999999ZZ

Ingred Name:ING 6:WASTE CONTR/ABSORB W/NON-COMBUSTIBLE SORBENT MATL.
PLACE RESIDUE IN DOT-APPRVD WASTE CONTR. KEEP OUT OF (ING 8)

RTECS #:9999999ZZ

Ingred Name:ING 7:SEWERS

, STORM DRAINS, SURF H*2O, & SOIL. COMPLY W/ALL

APPLIC GOVT REGS ON SPILL RPTG & HNDLG & DISP OF WASTE.

RTECS #:9999999ZZ

Ingred Name:OTHER PREC: CONT W/AIR, IT MAY BE APPROP TO FILL CONTR
HEADSPACE W/AN INERT GAS, SUCH AS NITROGEN. DO NOT CUT, (ING 10)

RTECS #:9999999ZZ

Ingred Name:ING 9:GRIND/WELD/DRILL ON/NEAR CONTR. CONTR, EVEN THOSE
HAVE BEEN EMPTIED, WILL RETAIN PROD RESIDUE & VAP. (ING 11)

RTECS #:9999999ZZ

Ingred Name:ING 10:ALWAYS OBEY HAZ WARNINGS & HNDLE EMPTY CONTR AS

IF

THEY WERE FULL. DISTILLATION, EVAP/EXPOSE TO LIGHT (ING 12)

RTECS #:9999999ZZ

Ingred Name:ING 11:WILL ACCELERATE PEROXIDE FORMATION. DO NOT
DISTILL/BOIL TO DRYNESS. ADDN OF REDUCING AGENTS/H*2O TENDS (ING
13)

RTECS #:9999999ZZ

Ingred Name:ING 12:TO LESSEN PEROXIDE FORMATION.

RTECS #:9999999ZZ

Ingred Name:RESP PROT: SCBA IN PRESENCE DEMAND MODE, OR A NIOSH/MSHA
APPROVED SUPPLIED-AIR RESPIRATOR.

RTECS #:9999999ZZ

Ingred Name:HYGIENE PRACT: TO THE SEVERITY OF AN EYE INJURY.

R

TECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

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

Health Hazards Acute and Chronic:INHAL: VAP & MISTS IRRITATE

NOSE/THROAT/RESP TRACT. INHAL OF HIGHER CONC MAY CAUSE

HDCH/NAUSA/VOMIT, DIZZ & NARC. INHAL OF VERY HIGH CONC/PRLNG EXPOS

MAY CAUSE UNCON. EYE: VAP WILL IRRITATE EYES. LIQ & MISTS

WILL

IRRITATE & MAY BURN EYES. SKIN: BRIEF CONT MAY DRY SKIN. PRLNG/RPTD

CONT MAY IRRITATE (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT

Effects of Overexposure:HLTH HAZ: SKIN, CAUSING DERM. INGEST:

SWALLOWING QTY CAUSES HDCH, NAUS, VOMIT & PERHAPS UNCON. CHRONIC:

PRLNG/RPTD OVEREXPOS MAY RESULT IN DELAYED LIVER AND/OR KIDNEY

DAMAGE.

Medical Cond Aggravated by Exposure:THIS MATERIAL, OR ITS EMISSIONS MAY

AGGRAVATE PULMONARY/BRONCHIAL DISEASE AND OR CAUSE B

REATHING

DIFFICULTY.

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

First Aid:INHAL:REMOVE TO FRESH AIR. GIVE ARTF RESP IF NOT BRTHG. GET

IMMED MED ATTN. EYE: IMMED FLUSH W/LOTS OF RUNNING H*2O FOR @ LST

15 MIN, LIFT LIDS OCCAS. GET IMMED MED ATTN. SKIN: IMMED WASH

W/LOTS OF SO AP & H*2O. REMOVE CONTAMD CLTHG & SHOES; WASH BEFORE

REUSE. GET MED ATTN IF IRRIT PERSISTS AFTER WASHING. INGEST: DO NOT

INDUCE VOMIT. IF CONSCIOUS, GIVE LOTS OF H*2O/MILK.

GET IMMEDIATE MEDICAL
ATTENTION (ING 3)

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

Flash Point Method: TCC

Flash Point: 1F, -17C

Lower Limits: 2%

Upper Limits: 11.8%

Extinguishing Media: USE DRY CHEM, ALCOHOL FOAM, OR CO₂. WATER MAY BE INEFFECTIVE TO FIGHT FIRE BUT MAY BE USED FOR VAPOR SUPPRESSION.

Fire Fighting Procedures: NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT. USE WATER SPRAY TO COOL NEARBY CONTAINERS AND STRUCTURES EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:

EXTINGUISH ALL NEARBY SOURCES OF IGNITION SINCE VAPORS ARE HEAVY/AIR & MAY TRAVEL CONSIDERABLE DISTANCE TO IGNITION SOURCES & FLASHBACK. AVOID ACCUMULATION OF H₂O (SUPPLEMENTAL DATA)

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

Spill Release Procedures: WEAR PROTECTIVE EQUIPMENT INCLUDING POLYVINYL ALCOHOL BOOTS, GLOVES, & APRON, & NIOSH/MSHA APPROVED SCBA IN PRESSURE DEMAND MODE/NIOSH/MSHA APPROVED SUPPLIED-AIR RESPIRATOR. IF SPILL/LEAK IS SMALL, NIOSH/MSHA APPROVED FULL FACEPIECE AIR-PURIFYING CARTRIDGE RESPIRATOR EQUIPPED FOR (ING 4)

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions: KEEP AWAY FROM HEAT/SPARKS/FLAMES. STORE IN COOL, DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. KEEP AIR OUT OF CONTACT.

Other Precautions: ELECTRICALLY GROUND ALL EQUIPMENT WHEN HANDLING PRODUCT & USE ONLY NON-SPARKING TOOLS. KEEP CONTACT TIGHTLY CLOSED WHEN NOT IN USE. DO NOT USE PRESSURE TO EMPTY CONTACT. DO NOT GET IN EYES, ON SKIN, OR CLOTHING. SINCE PRODUCT DEGRADES UPON STANDING & IN (ING 9)

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

Respiratory Protection: IF USE CONDITIONS GENERATE VAPORS/MISTS, WEAR A NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR THOSE EMISSIONS LEVELS. APPROPRIATE RESPIRATOR MAY BE A NIOSH/MSHA APPROVED FULL FACEPIECE AIR-PURIFYING CARTRIDGE RESPIRATOR EQUIPPED FOR ORGANIC VAPORS/MISTS. A NIOSH/MSHA APPROVED (ING 14)

Ventilation: LOCAL MECHANICAL EXHAUST VENT CAPABLE OF MAINTAINING

G EMISSIONS @

POINT OF USE BELOW PEL.

Protective Gloves:POLYVINYL ALCOHOL GLOVES.

Eye Protection:CHEMICAL WORKERS GOGGLES .

Other Protective Equipment:LONG-SLEEVED SHIRT, TROUSERS, SFTY SHOES,
POLYVINYL APRON. AN EYEWASH & SAFETY SHOWER SHOULD BE NEARBY &
READY FOR USE.

Work Hygienic Practices:WASH THORO AFTER HNDLG. CONT LENSES SHOULD NOT
BE WORN WHEN WORKING W/CHEM BECAUSE CONT LENSES MAY CONTRIBUTE (ING
15)

Supplemental Safety and Health

EXPLO HAZ: BECAUSE PROD WILL FLOAT
ON H*2O & MAY BE REIGNITED ON SURF

OF H*2O. EXPLO VAP-AIR MIXT MAY BE FORMED ABOVE FL PT/BETWEEN LOWER
& UPPER FLAMM LIM. HOT ORG CHEM VAP/MISTS ARE SUSCEPTIBLE TO
SUDDEN SPONT COMBUSTION WHEN MIXED W/AIR. IGNIT MAY OCCUR @ TEMP
BELOW "AUTOIGNITION" OR "IGNITION TEMPERATURE.

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

Boiling Pt:B.P. Text:149F,65C

Vapor Pres:129-160

Vapor Density:2.5

Spec Gravity:0.9(H*2O=1)

Evaporation Rate & Reference:>1(BUTYL A
CETATE=1)

Solubility in Water:100

Appearance and Odor:ETHER-LIKE ODOR

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

Stability Indicator/Materials to Avoid:YES

OXIDIZERS, LITHIUM ALUMINUM HYDRIDE & ALKALINE EARTH HYDROXIDES.

Stability Condition to Avoid:HEAT, SPARKS, & OPEN FLAMES. EXPOSURE TO
LIGHT, PROLONGED EXPOSURE TO AIR.

Hazardous Decomposition Products:ON STANDING AND IN CONTACT WITH AIR
FORMS POTENTIALLY UNSTABLE PEROXIDES.

Conditions to Avoid Polymerizatio

n:POLYM CAN OCCUR IN PRESENCE OF

CATIONIC INITIATORS SUCH AS SELECTGED LEWIS ACIDS/STRONG PROTON
ACIDS.

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

Waste Disposal Methods:DISPOSE OF CONTAM PROD & MATL USED IN CLEANING
UP SPILLS/LEAKS IN MANNER APPRVD FOR MATL. CONSULT APPROP
FED/ST/LOC REGULATORY AGENCIES TO ASCERTAIN PROPER DISP PROC.
NOTE:EMPTY CONTR CAN HAVE RESIDUE /GASES & MISTS & ARE SUBJECT TO
PROPER WASTE DISP.

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