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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 00761

NAME: Tetrahydrofuran, anhydrous , stabilized with 250-300 ppm BHT

SYNONYMS: THF

24 HOUR EMERGENCY TELEPHONE: (800) 535-5053(USA)
352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE: (630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

FLAMMABLE LIQUIDS (CATEGORY 2), H225

ACUTE TOXICITY, ORAL (CATEGORY 4), H302

EYE IRRITATION (CATEGORY 2A), H319

CARCINOGENICITY (CATEGORY 2), H351

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, CENTRAL NERVOUS SYSTEM, H335, H336

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM



SIGNAL WORD

DANGER

HAZARD STATEMENT(S)

H225	HIGHLY <u>FLAMMABLE</u> LIQUID AND VAPOUR
H302	HARMFUL IF SWALLOWED.
H319	CAUSES SERIOUS EYE <u>IRRITATION</u>
H335	MAY CAUSE RESPIRATORY IRRITATION.
H336	MAY CAUSE DROWSINESS OR DIZZINESS.
H351	SUSPECTED OF CAUSING CANCER.

PRECAUTIONARY STATEMENT(S)

P201	OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
P202	DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.
P210	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. - NO SMOKING.
P233	KEEP CONTAINER TIGHTLY CLOSED.
P240	GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.
P241	USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ LIGHTING EQUIPMENT.
P242	USE ONLY NON-SPARKING TOOLS.
P243	TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE.
P261	AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/ SPRAY.
P264	WASH THOROUGHLY AFTER HANDLING.
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P280	WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE PROTECTION.
P301 + P312 + P330	IF SWALLOWED: CALL A POISON CENTER/DOCTOR IF YOU FEEL UNWELL. RINSE MOUTH.
P303 + P361 + P353	IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER.
P304 + P340 + P312	IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING. CALL A POISON CENTER/DOCTOR IF YOU FEEL UNWELL.
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.
P308 + P313	IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ ATTENTION.
P337 + P313	IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ ATTENTION.
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-RESISTANT FOAM TO EXTINGUISH.
P403 + P233	STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED.
P403 + P235	STORE IN A WELL-VENTILATED PLACE. KEEP COOL
P405	STORE LOCKED UP.
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

**HAZARDS NOT
OTHERWISE
CLASSIFIED
(HNOC) OR NOT
COVERED BY GHS**

MAY FORM EXPLOSIVE PEROXIDES.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: C₄H₈O
MW: 72.11
CAS-NO. 109-99-9
PURITY: ≥ 99.9% (GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Tetrahydrofuran, anhydrous , stabilized with 250-300 ppm BHT		
	FLAM. LIQ. 2; ACUTE TOX. 4; EYE IRRIT. 2A; CARC. 2; STOT SE 3; H225, H302, H319, H351, H335, H336 CONCENTRATION LIMITS: ≥ 25 %: EYE IRRIT. 2, H319; ≥ 25 %: STOT SE 3, H335	≤ 100 %

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE SHOW THIS MATERIAL SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.

IF INHALED AFTER INHALATION: FRESH AIR. CALL IN PHYSICIAN.

IN CASE OF SKIN CONTACT IN CASE OF SKIN CONTACT: TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ SHOWER

IN CASE OF EYE CONTACT AFTER EYE CONTACT: RINSE OUT WITH PLENTY OF WATER. CALL IN OPHTHALMOLOGIST. REMOVE CONTACT

	LENSES.
IF SWALLOWED	AFTER SWALLOWING: IMMEDIATELY MAKE VICTIM DRINK WATER (TWO GLASSES AT MOST). CONSULT A PHYSICIAN.
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11.
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED	NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA
CARBON DIOXIDE (CO2) FOAM DRY POWDER

UNSUITABLE EXTINGUISHING MEDIA
FOR THIS SUBSTANCE/MIXTURE NO LIMITATIONS OF EXTINGUISHING AGENTS ARE GIVEN.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.
COMBUSTIBLE.
PAY ATTENTION TO FLASHBACK.
VAPORS ARE HEAVIER THAN AIR AND MAY SPREAD ALONG FLOORS.
DEVELOPMENT OF HAZARDOUS COMBUSTION GASES OR VAPOURS POSSIBLE IN THE EVENT OF FIRE.
FORMS EXPLOSIVE MIXTURES WITH AIR AT AMBIENT TEMPERATURES.

ADVICE FOR FIREFIGHTERS

STAY IN DANGER AREA ONLY WITH SELF-CONTAINED BREATHING APPARATUS. PREVENT SKIN CONTACT BY KEEPING A SAFE DISTANCE OR BY WEARING SUITABLE PROTECTIVE CLOTHING.

FURTHER INFORMATION

REMOVE CONTAINER FROM DANGER ZONE AND COOL WITH WATER. PREVENT FIRE EXTINGUISHING WATER FROM CONTAMINATING SURFACE WATER OR THE GROUND WATER SYSTEM.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	ADVICE FOR NON-EMERGENCY PERSONNEL: DO NOT BREATHE VAPORS, AEROSOLS. AVOID SUBSTANCE CONTACT. ENSURE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT AND SOURCES OF IGNITION. EVACUATE THE DANGER AREA, OBSERVE EMERGENCY PROCEDURES, CONSULT AN EXPERT. FOR PERSONAL PROTECTION SEE SECTION 8.
ENVIRONMENTAL PRECAUTIONS	DO NOT LET PRODUCT ENTER DRAINS. RISK OF EXPLOSION.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	COVER DRAINS. COLLECT, BIND, AND PUMP OFF SPILLS. OBSERVE POSSIBLE MATERIAL RESTRICTIONS (SEE SECTIONS 7 AND 10). DISPOSE OF PROPERLY. CLEAN UP AFFECTED AREA
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	WORK UNDER HOOD. DO NOT INHALE SUBSTANCE/MIXTURE. AVOID GENERATION OF VAPOURS/AEROSOLS. KEEP AWAY FROM OPEN FLAMES, HOT SURFACES AND SOURCES OF IGNITION. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS AND FACE AFTER WORKING WITH SUBSTANCE. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. KEEP AWAY FROM HEAT AND SOURCES OF IGNITION. TEST FOR PEROXIDE FORMATION PERIODICALLY AND BEFORE DISTILLATION. STORAGE CLASS (TRGS 510): 3: FLAMMABLE LIQUIDS Store at RT
SPECIFIC END USE(S)	APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

COMPONENT	CAS-NO.	VALUE	CONTROL PARAMETERS	BASIS
Tetrahydrofuran, anhydrous , stabilized with 250-300 ppm BHT	109-99-9	TWA	50 PPM	USA. ACGIH THRESHOLD LIMIT VALUES (TLV)
	REMARKS	CONFIRMED ANIMAL CARCINOGEN WITH UNKNOWN RELEVANCE TO HUMANS DANGER OF CUTANEOUS ABSORPTION		
		STEL	100 PPM	USA. ACGIH THRESHOLD LIMIT VALUES (TLV)
		CONFIRMED ANIMAL CARCINOGEN WITH UNKNOWN RELEVANCE TO HUMANS DANGER OF CUTANEOUS ABSORPTION		
		ST	250 PPM 735 MG/M3	USA. NIOSH RECOMMENDED EXPOSURE LIMITS
		TWA	200 PPM 590 MG/M3	USA. NIOSH RECOMMENDED EXPOSURE LIMITS
		TWA	200 PPM 590 MG/M3	USA. OCCUPATIONAL EXPOSURE LIMITS (OSHA) - TABLE Z-1 LIMITS FOR AIR CONTAMINANTS
		PEL	200 PPM 590 MG/M3	CALIFORNIA PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS
		STEL	250 PPM 735 MG/M3	CALIFORNIA PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS

BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS

COMPONENT	CAS-NO.	PARAMETERS	VALUE	BIOLOGICAL SPECIMEN	BASIS
Tetrahydrofuran, anhydrous , stabilized with 250-300 ppm BHT	109-99-9	TETRAHYDROFURAN	2 MG/L	URINE	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)
	REMARKS	END OF SHIFT (AS SOON AS POSSIBLE AFTER EXPOSURE CEASES)			

DERIVED NO EFFECT LEVEL (DNEL)

APPLICATION AREA	ROUTES OF EXPOSURE	HEALTH EFFECT	VALUE
WORKERS	SKIN CONTACT	LONG-TERM SYSTEMIC EFFECTS	25MG/KG BW/D
CONSUMERS	SKIN CONTACT	LONG-TERM SYSTEMIC EFFECTS	15MG/KG BW/D
WORKERS	INHALATION	LONG-TERM LOCAL EFFECTS	150 MG/M3
WORKERS	INHALATION	LONG-TERM SYSTEMIC EFFECTS	150 MG/M3
CONSUMERS	INHALATION	LONG-TERM SYSTEMIC EFFECTS	62 MG/M3
CONSUMERS	INHALATION	ACUTE LOCAL EFFECTS	150 MG/M3
CONSUMERS	INHALATION	ACUTE SYSTEMIC EFFECTS	150 MG/M3

PREDICTED NO EFFECT CONCENTRATION (PNEC)

COMPARTMENT	VALUE
SOIL	2.13 MG/KG
SEA WATER	0.432 MG/L
FRESH WATER	4.32 MG/L
SEA SEDIMENT	2.33 MG/KG
FRESH WATER SEDIMENT	23.3 MG/KG
ONSITE SEWAGE TREATMENT PLANT	4.6 MG/L

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS AND FACE AFTER WORKING WITH SUBSTANCE.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU). SAFETY GLASSES

SKIN PROTECTION HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.

BODY PROTECTION FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING.

RESPIRATORY PROTECTION REQUIRED WHEN VAPOURS/AEROSOLS ARE GENERATED. OUR RECOMMENDATIONS ON FILTERING RESPIRATORY PROTECTION ARE BASED ON THE FOLLOWING STANDARDS: DIN EN 143, DIN 14387 AND OTHER ACCOMPANYING STANDARDS RELATING TO THE USED RESPIRATORY PROTECTION SYSTEM.

CONTROL OF ENVIRONMENTAL EXPOSURE DO NOT LET PRODUCT ENTER DRAINS. RISK OF EXPLOSION.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear free or colorless clear liquid
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	CA.7 - 8
MELTING POINT/FREEZING POINT	
BOILING POINT	67 °C (Lit.)
FLASH POINT	-17 °C
EVAPOURATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	UPPER EXPLOSION LIMIT: 12.4 %(V) - (THF) LOWER EXPLOSION LIMIT: 1.5 %(V)
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	0.89 (Lit.)
WATER SOLUBILITY	MISCIBLE
PARTITION COEFFICIENT: N- OCTANOL/WATER	LOG POW: 0.45 AT 25 C
AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	NO DATA AVAILABLE

OTHER SAFETY INFORMATIONNO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	FORMATION OF PEROXIDES POSSIBLE. VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR.
CHEMICAL STABILITY	SENSITIVITY TO LIGHT SENSITIVE TO AIR. THE PRODUCT IS CHEMICALLY STABLE UNDER STANDARD AMBIENT CONDITIONS. CONTAINS THE FOLLOWING STABILIZER(S): BUTYL HYDROXYTOLUENE (BHT) (250 PPM)

POSSIBILITY OF HAZARDOUS REACTIONS	A RISK OF EXPLOSION AND/OR OF TOXIC GAS FORMATION EXISTS WITH THE FOLLOWING SUBSTANCES: ALKALI HYDROXIDES BROMINE HYDRIDES POTASSIUM LITHIUM ALUMINIUM HYDRIDE THIONYL CHLORIDE OXIDIZING AGENTS OXYGEN AMINOPHENOL WITH PEROXIDES EXOTHERMIC REACTION WITH: ACIDS HALIDES PEROXI COMPOUNDS
CONDITIONS TO AVOID	DISTILLATION (RISK OF EXPLOSION). WARMING. MOISTURE.
INCOMPATIBLE MATERIALS	RUBBER, VARIOUS PLASTICS, TIN
HAZARDOUS DECOMPOSITION PRODUCTS	PEROXIDES IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	ACUTE TOXICITY ESTIMATE ORAL - 1,650 MG/KG (CALCULATION METHOD) LD50 ORAL - RAT - MALE AND FEMALE - 1,650 MG/KG REMARKS: (ECHA) SYMPTOMS: IRRITATION OF MUCOUS MEMBRANES LC50 INHALATION - RAT - MALE AND FEMALE - 6 H - > 14.7 MG/L VAPOR (US-EPA) LD50 DERMAL - RAT - MALE AND FEMALE - > 2,000 MG/KG (OECD TEST GUIDELINE 402)
SKIN CORROSION/IRRITATION	SKIN - RABBIT RESULT: NO SKIN IRRITATION - 72 H (DRAIZE TEST) REMARKS: REPEATED OR PROLONGED EXPOSURE MAY CAUSE SKIN IRRITATION AND DERMATITIS, DUE TO DEGREASING PROPERTIES OF THE PRODUCT.

**SERIOUS EYE
DAMAGE/EYE IRRITATION** EYES - RABBIT
RESULT: CAUSES SERIOUS EYE IRRITATION.
REMARKS: (IUCLID)
REMARKS: CLASSIFIED ACCORDING TO REGULATION (EU)
1272/2008, ANNEX VI (TABLE 3.1/3.2)

**RESPIRATORY OR SKIN
SENSITISATION** LOCAL LYMPH NODE ASSAY (LLNA) - MOUSE
RESULT: NEGATIVE
(OECD TEST GUIDELINE 429)

**GERM CELL
MUTAGENICITY** TEST TYPE: AMES TEST
TEST SYSTEM: S. TYPHIMURIUM
METABOLIC ACTIVATION: WITH AND WITHOUT
METABOLIC ACTIVATION
METHOD: OECD TEST GUIDELINE 471
RESULT: NEGATIVE
TEST TYPE: IN VITRO MAMMALIAN CELL GENE MUTATION
TEST
TEST SYSTEM: CHINESE HAMSTER OVARY CELLS
METABOLIC ACTIVATION: WITH AND WITHOUT
METABOLIC ACTIVATION
METHOD: OECD TEST GUIDELINE 476
RESULT: NEGATIVE
TEST TYPE: CHROMOSOME ABERRATION TEST IN VITRO
TEST SYSTEM: CHINESE HAMSTER OVARY CELLS
METABOLIC ACTIVATION: WITH AND WITHOUT
METABOLIC ACTIVATION
METHOD: OECD TEST GUIDELINE 473
RESULT: NEGATIVE

TEST TYPE: MICRONUCLEUS TEST
SPECIES: MOUSE
CELL TYPE: RED BLOOD CELLS (ERYTHROCYTES)
APPLICATION ROUTE: INHALATION (VAPOR)
METHOD: OECD TEST GUIDELINE 474
RESULT: NEGATIVE

CARCINOGENICITY
SUSPECTED OF CAUSING CANCER.
IARC: 2B - GROUP 2B: POSSIBLY CARCINOGENIC TO HUMAN
NTP: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS
GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A
KNOWN OR ANTICIPATED CARCINOGEN BY NTP.
OSHA: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS
GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF
REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	<p>INHALATION - MAY CAUSE RESPIRATORY IRRITATION. - CENTRAL NERVOUS SYSTEM</p> <p>REMARKS: CLASSIFIED ACCORDING TO REGULATION (EU) 1272/2008, ANNEX VI (TABLE 3.1/3.2)</p> <p>MAY CAUSE DROWSINESS OR DIZZINESS.</p>
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	<p>REPEATED DOSE TOXICITY - RAT - MALE AND FEMALE - ORAL - 4 WEEKS</p> <p>RTECS: LU5950000</p> <p>IRRITANT EFFECTS, COUGH, SHORTNESS OF BREATH, NARCOSIS, SOMNOLENCE</p> <p>TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.</p> <p>IN HIGH DOSES:</p> <p>SOMNOLENCE NARCOSIS</p> <p>OTHER DANGEROUS PROPERTIES CAN NOT BE EXCLUDED.</p> <p>THIS SUBSTANCE SHOULD BE HANDLED WITH PARTICULAR CARE.</p> <p>STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE</p>

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY TOXICITY TO FISH	<p>FLOW-THROUGH TEST LC50 - PIMEPHALES PROMELAS (FATHEAD MINNOW) - 2,160 MG/L - 96 H</p> <p>(OECD TEST GUIDELINE 203)</p>
TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES	<p>STATIC TEST EC50 - DAPHNIA MAGNA (WATER FLEA) - 3,485 MG/L - 48 H</p> <p>(OECD TEST GUIDELINE 202)</p>

TOXICITY TO FISH(CHRONIC TOXICITY) FLOW-THROUGH TEST NOEC - PIMEPHALES PROMELAS (FATHEAD MINNOW) - 216 MG/L - 33 D
REMARKS: (ECHA)

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY AEROBIC BIOCHEMICAL OXYGEN DEMAND - EXPOSURE TIME 28 D
RESULT: 39 % - NOT READILY BIODEGRADABLE.
(OECD TEST GUIDELINE 301D)

BIOACCUMULATIVE POTENTIAL NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND VPVB ASSESSMENT PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS NO DATA AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT WASTE MATERIAL MUST BE DISPOSED OF IN ACCORDANCE WITH THE NATIONAL AND LOCAL REGULATIONS. LEAVE CHEMICALS IN ORIGINAL CONTAINERS. NO MIXING WITH OTHER WASTE.

CONTAMINATED PACKAGING DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)
PROPER SHIPPING NAME: TETRAHYDROFURAN
UN NUMBER: 2056
CLASS: 3
PACKING GROUP: II
REPORTABLE QUANTITY (RQ): 1000 LBS
POISON INHALATION HAZARD: NO

IMDG

PROPER SHIPPING NAME: TETRAHYDROFURAN
UN NUMBER: 2056
CLASS: 3
PACKING GROUP: II
EMS-NO: F-E, S-D

IATA

PROPER SHIPPING NAME: TETRAHYDROFURAN
UN NUMBER: 2056
CLASS: 3
PACKING GROUP: II

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS WITH A SECTION 302 EHS TPQ.

SARA 313 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS FIRE HAZARD, ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

	CAS NO.	REVISION DATE
Tetrahydrofuran, anhydrous , stabilized with 250-300 ppm BHT	109-99-9	02-16-1993

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

	CAS NO.	REVISION DATE
Tetrahydrofuran, anhydrous , stabilized with 250-300 ppm BHT	109-99-9	02-16-1993

CALIFORNIA PROP. 65 COMPONENTS

WHICH IS/ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER

	CAS NO.	REVISION DATE
Tetrahydrofuran, anhydrous , stabilized with 250-300 ppm BHT	109-99-9	12-31-2021

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H225	HIGHLY <u>FLAMMABLE</u> LIQUID AND VAPOUR
H302	HARMFUL IF SWALLOWED.
H319	CAUSES SERIOUS EYE <u>IRRITATION</u>
H335	MAY CAUSE RESPIRATORY IRRITATION.
H336	MAY CAUSE DROWSINESS OR DIZZINESS.
H351	SUSPECTED OF CAUSING CANCER.

MSDS LEGEND

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGINISTS
CAS:	CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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