# Chem-Impex International Inc.

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# SAFETY DATA SHEET

#### SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 34425

NAME: Isobutyl acetate

SYNONYMS: Acetic acid isobutyl ester

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

# ACUTE AQUATIC TOXICITY (CATEGORY 3), H402

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 FLAMMABLE LIQUID AND VAPOUR.H336 MAY CAUSE DROWSINESS OR DIZZINESS.

H402 HARMFUL TO AQUATIC LIFE.

# PRECAUTIONARY STATEMENT(S)

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.

P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA

P273 AVOID RELEASE TO THE ENVIRONMENT.

P280 WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE

PROTECTION.

P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/ 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.

P370 + P378 IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR

ALCOHOL-RESISTANT FOAM FOR EXTINCTION.

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 REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR

**OTHERWISE** CRACKING.

CLASSIFIED (HNOC) OR NOT COVERED

BY GHS

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:  $C_6H_{12}O_2$ 

MW: 116.16

CAS-NO. 110-19-0

PURITY: 98 - 100% (GC)

#### HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Isobutyl acetate		
	FLAM. LIQ. 2; STOT SE 3;	90 - 100 %
	AQUATIC ACUTE 3; H225,	
	H336, H402	

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 CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA

SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT

OF DANGEROUS AREA.

**IF INHALED** IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF

NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

CONSULT A PHYSICIAN.

IN CASE OF SKIN WASH OFF WITH SOAP AND PLENTY OF WATER.

**CONTACT** CONSULT A PHYSICIAN.

IN CASE OF EYE FLUSH EYES WITH WATER AS A PRECAUTION

CONTACT

**IF SWALLOWED** DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING

BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT THE MOST IMPORTANT KNOWN SYMPTOMS AND

SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE

**EFFECTS, BOTH ACUTE** SECTION 2.2) AND/OR IN SECTION 11

AND DELAYED

INDICATION OF ANY

NO DATA AVAILABLE

IMMEDIATE MEDICAL

#### SECTION 5. FIRE AND EXPLOSION DATA

**EXTINGUISHING MEDIA** 

SUITABLE USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

**EXTINGUISHING MEDIA** CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS NO DATA AVAILABLE

ARISING FROM THE

SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF CONTAINED BREATHING APPARATUS FOR

**FIREFIGHTERS** FIRE FIGHTING IF NECESSARY.

FURTHER INFORMATION USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONALUSE PERSONAL PROTECTIVE EQUIPMENT. AVOIDPRECAUTIONS,BREATHING VAPOURS, MIST OR GAS. ENSUREPROTECTIVEADEQUATE VENTILATION. REMOVE ALL SOURCES OFEQUIPMENT ANDIGNITION. EVACUATE PERSONNEL TO SAFE AREAS.EMERGENCYBEWARE OF VAPOURS ACCUMULATING TO FORM

**PROCEDURES** EXPLOSIVE CONCENTRATIONS. VAPOURS CAN

ACCUMULATE IN LOW AREAS.

FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE

TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE

AVOIDED.

METHODS ANDCONTAIN SPILLAGE, AND THEN COLLECT WITH ANMATERIALS FORELECTRICALLY PROTECTED VACUUM CLEANER OR BYCONTAINMENT ANDWET-BRUSHING AND PLACE IN CONTAINER FOR

CLEANING UP DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE

SECTION 13).

**REFERENCE TO OTHER** F

**SECTIONS** 

**PRECAUTIONS** 

FOR DISPOSAL SEE SECTION 13.

# **SECTION 7. HANDLING AND STORAGE**

**PRECAUTIONS FOR SAFE** AVOID INHALATION OF VAPOUR OR MIST.

HANDLING USE EXPLOSION-PROOF EQUIPMENT.KEEP AWAY FROM

SOURCES OF IGNITION - NO SMOKING.TAKE MEASURES TO PREVENT THE BUILD UP OF

ELECTROSTATIC CHARGE.

FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT

UPRIGHT TO PREVENT LEAKAGE.

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	BASIS	
			PARAMETERS		
Isobutyl acetate	110-19-0	TWA	150 PPM	USA. ACGIH THRESHOLD	
				LIMIT VALUES (TLV)	
	REMARKS	UPPER RESPIRATORY TRACT IRRITATION			
		EYE IRRITATION			
		ADOPTED VALUES OR NOTATIONS ENCLOSED ARE THOSE			
		FOR WHICH CHANGES ARE PROPOSED IN THE NIC			
		SEE NOTICE OF INTENDED CHANGES (NIC)			
		TWA	150 PPM	USA. NIOSH	
			700 MG/M3	RECOMMENDED EXPOSURE	
				LIMITS	
		TWA	150 PPM	USA. OCCUPATIONAL	
			700 MG/M3	EXPOSURE LIMITS (OSHA) -	
				TABLE Z-1 LIMITS FOR AIR	
				CONTAMINANTS	
		THE VALUE IN MG/M3 IS APPROXIMATE.			
		PEL	150 PPM	CALIFORNIA PERMISSIBLE	
			700 MG/M3	EXPOSURE LIMITS FOR	
				CHEMICAL CONTAMINANTS	
		TWA	50 PPM	USA. ACGIH THRESHOLD	
				LIMIT VALUES (TLV)	
		UPPER RESPIRATORY TRACT IRRITATION			
		EYE IRRITATION			

	STEL	150 PPM	USA. ACGIH THRESHOLD LIMIT VALUES (TLV)
	UPPER RESPIRATORY TRACT IRRITATION EYE IRRITATION		

#### **EXPOSURE CONTROLS**

APPROPRIATE ENGINEERING CONTROLS

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

# PERSONAL PROTECTIVE EQUIPMENT

**EYE/FACE PROTECTION** 

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

**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.

SPLASH CONTACT

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.4 MM

BREAK THROUGH TIME: 30 MIN

MATERIAL TESTED: CAMATRIL (KCL 730, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.

BODY PROTECTION

IMPERVIOUS CLOTHING, FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING. THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

**RESPIRATORY** WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING **PROTECTION** RESPIRATORS ARE APPROPRIATE USE A FULL-FACE

RESPIRATORS ARE APPROPRIATE USE A FULL-FACE RESPIRATOR WITH MULTIPURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS

A BACKUP TO ENGINEERING CONTROLS. IF THE

RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE

A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

CONTROL OF ENVIRONMENTAL

**EXPOSURE** 

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO

DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE

AVOIDED.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Clear, colorless liquid
ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE

**MELTING** 

POINT/FREEZING POINT

INITIAL BOILING POINT 115 - 117 °C

AND BOILING RANGE

FLASH POINT 16 °C

EVAPORATION RATE NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER UPPER EXPLOSION LIMIT: 10.5 %(V) FLAMMABILITY OR LOWER EXPLOSION LIMIT: 1.3 %(V)

EXPLOSIVE LIMITS

VAPOUR PRESSURE 20 HPA (15 MMHG) AT 20 C

VAPOUR DENSITY 4.01 - (AIR = 1.0)

RELATIVE DENSITY

WATER SOLUBILITY 5.6 G/L AT 20 C - SOLUBLE PARTITION COEFFICIENT: LOG POW: 2.3 AT 25 C

N- OCTANOL/WATER

AUTO-IGNITION 430 C AT 1,019 HPA (764 MMHG)

**TEMPERATURE** 

DECOMPOSITION NO DATA AVAILABLE

TEMPERATURE

VISCOSITY NO DATA AVAILABLE EXPLOSIVE PROPERTIES NO DATA AVAILABLE OXIDIZING PROPERTIES NO DATA AVAILABLE

## OTHER SAFETY INFORMATION

SURFACE TENSION 62.5 MN/M AT 20 C

RELATIVE VAPOUR DENSITY

4.01 - (AIR = 1.0)

#### SECTION 10. STABILITY AND REACTIVITY

**REACTIVITY** NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE

CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS VAPOURS MAY FORM EXPLOSIVE MIXTURE WITH AIR.

**CONDITIONS TO AVOID** HEAT, FLAMES AND SPARKS

INCOMPATIBLE MATERIALS

STRONG OXIDIZING AGENTS, STRONG BASES

HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - CARBON OXIDES OTHER DECOMPOSITION PRODUCTS - NO DATA

**AVAILABLE** 

IN THE EVENT OF FIRE: SEE SECTION 5

# SECTION 11. TOXICOLOGICAL INFORMATION

# INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY LD50 ORAL - RAT - MALE - 13,413 MG/KG

INHALATION: NO DATA AVAILABLE

LD50 DERMAL - RABBIT - > 17,400 MG/KG

NO DATA AVAILABLE

**SKIN** NO DATA AVAILABLE

**CORROSION/IRRITATION** 

SERIOUS EYE NO DATA AVAILABLE

**DAMAGE/EYE IRRITATION** 

**RESPIRATORY OR SKIN** MAXIMISATION TEST - GUINEA PIG

**SENSITISATION** RESULT: DOES NOT CAUSE SKIN SENSITISATION.

**GERM CELL HAMSTER** MUTAGENICITY LUNGS

**RESULT: NEGATIVE** 

**CARCINOGENICITY** 

NO COMPONENT OF THIS PRODUCT PRESENT AT IARC:

> LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC. 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.

NO COMPONENT OF THIS PRODUCT PRESENT AT OSHA:

> LEVELS GREATER THAN OR EOUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN** 

**TOXICITY - SINGLE** 

**EXPOSURE** 

NTP:

NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN** 

**TOXICITY - REPEATED** 

**EXPOSURE** 

NO DATA AVAILABLE

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL **INFORMATION**  RTECS: AI4025000

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE

NOT BEEN THOROUGHLY INVESTIGATED.

#### SECTION 12. **ECOLOGICAL INFORMATION**

**TOXICITY** 

TOXICITY TO FISH LC50 - ORYZIAS LATIPES - 17 MG/L - 96 H

OTHER AQUATIC **INVERTEBRATES** 

TOXICITY TO DAPHNIA AND IMMOBILIZATION EC50 - DAPHNIA MAGNA (WATER

FLEA) - 25 MG/L - 48 H

TOXICITY TO ALGAE **GROWTH INHIBITION EC50 -**

PSEUDOKIRCHNERIELLA SUBCAPITATA (GREEN

ALGAE) - 370 MG/L - 72 H

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY AEROBIC - EXPOSURE TIME 20 D

RESULT: 81 % - READILY BIODEGRADABLE.

**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 AN ENVIRONMENTAL HAZARD CANNOT BE

EXCLUDED IN THE EVENT OF UNPROFESSIONAL

HANDLING OR DISPOSAL. HARMFUL TO AQUATIC LIFE.

#### SECTION 13. DISPOSAL CONSIDERATIONS

### WASTE TREATMENT METHODS

PRODUCT BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH

AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA

CARE IN IGNITING AS THIS MATERIAL IS HIGHLY

FLAMMABLE. OFFER SURPLUS AND NON-RECYCLABLE

SOLUTIONS TO A LICENSED DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

### SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: ISOBUTYL ACETATE N.O.S. (Isobutyl acetate)

UN NUMBER: 1213 CLASS: 3 PACKING GROUP: II

REPORTABLE QUANTITY 5000 LBS

(RO):

POISON INHALATION NO

HAZARD:

**IMDG** 

PROPER SHIPPING NAME: ISOBUTYL ACETATE N.O.S. (Isobutyl acetate)

UN NUMBER: 1213

CLASS: 3
PACKING GROUP: II

EMS-NO: F-E, S-D

**IATA** 

PROPER SHIPPING NAME: ISOBUTYL ACETATE N.O.S. (Isobutyl acetate)

UN NUMBER: 1213 CLASS: 3 PACKING GROUP: II

#### SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

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

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Isobutyl acetate 110-19-0 03-01-2007

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Isobutyl acetate 110-19-0 03-01-2007

**CALIFORNIA PROP. 65 COMPONENTS** 

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

# **SECTION 16. OTHER INFORMATION**

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

AQUATIC ACUTE ACUTE AQUATIC TOXICITY FLAM. LIQ. FLAMMABLE LIQUIDS

H225 HIGHLY FLAMMABLE LIQUID AND VAPOUR. H336 MAY CAUSE DROWSINESS OR DIZZINESS.

H402 HARMFUL TO AQUATIC LIFE.

STOT SE SPECIFIC TARGET ORGAN TOXICITY - SINGLE

**EXPOSURE** 

MSDS LEGEND

MW: MOLECULAR WEIGHT MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENENTAL

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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