Chem-Impex International Inc.

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SAFETY DATA SHEET

34341

trans-2-Hexen-1-al

trans-2-Hexenyl aldehyde *trans*-3-Propylacrolein

352-323-3500 (INTERNATIONAL)

(800) 535-5053(USA)

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:

NAME:

SYNONYMS:

24 HOUR EMERGENCY TELEPHONE:

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER (630) 766-2112 SERVICE:

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS) FLAMMABLE LIQUIDS (CATEGORY 3), H226 ACUTE TOXICITY, ORAL (CATEGORY 4), H302 ACUTE TOXICITY, DERMAL (CATEGORY 3), H311

SKIN SENSITISATION (CATEGORY 1), H317

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

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM



SIGNAL WORD

HAZARD STATEMENT(S)

H226	FLAMMABLE LIQUID AND VAPOUR.
H302	HARMFUL IF SWALLOWED.
H311	TOXIC IN CONTACT WITH SKIN.
H317	MAY CAUSE AN ALLERGIC SKIN REACTION.

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 EOUIPMENT. USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ LIGHTING P241 EOUIPMENT. P242 USE ONLY NON-SPARKING TOOLS. P243 TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/ SPRAY. P261 P264 WASH SKIN THOROUGHLY AFTER HANDLING. P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED P272 OUT OF THE WORKPLACE. P280 WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE PROTECTION. P301 + P312 + P330IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/ PHYSICIAN IF YOU FEEL UNWELL. RINSE MOUTH. IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY ALL P303 + P361 + P353 CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ SHOWER P333 + P313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ ATTENTION. P363 WASH CONTAMINATED CLOTHING BEFORE REUSE. P370 + P378IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-RESISTANT FOAM FOR EXTINCTION. P403 + P235STORE IN A WELL-VENTILATED PLACE. KEEP COOL. P405 STORE LOCKED UP. DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE P501 DISPOSAL PLANT.

HAZARDS NOT	NONE
OTHERWISE	
CLASSIFIED (HNOC)	
OR NOT COVERED BY	
GHS	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:	$C_6H_{10}O$
MW:	98.15
CAS-NO.	6728-26-3
PURITY:	95 - 100% (GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
trans-2-Hexen-1-al		
	FLAM. LIQ. 3; ACUTE TOX. 4;	<= 100 %
	ACUTE TOX. 3; H226, H302, H311	

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 CONTACT	WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT	RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.
IF SWALLOWED	DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.
MOST IMPORTANT SYMPTOMS AND	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11.

EFFECTS, BOTH ACUTE AND DELAYED

INDICATION OF ANYNO DATA AVAILABLEIMMEDIATE MEDICALATTENTION AND SPECIALTREATMENT NEEDED

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA	USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	CARBON OXIDES
ADVICE FOR FIREFIGHTERS	WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.
FURTHER INFORMATION	USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	WEAR RESPIRATORY PROTECTION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. BEWARE OF VAPOURS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPOURS CAN ACCUMULATE IN LOW AREAS.
	FOR PERSONAL PROTECTION SEE SECTION 8.
ENVIRONMENTAL PRECAUTIONS	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE SECTION 13).

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	AVOID CONTACT WITH SKIN AND EYES. AVOID INHALATION OF VAPOUR OR MIST. 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. LIGHT SENSITIVE. STORE UNDER INERT GAS. 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 CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

EXPOSURE CONTROLS

APPROPRIATE	AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH
ENGINEERING CONTROLS	HANDS BEFORE BREAKS AND IMMEDIATELY AFTER
	HANDLING THE PRODUCT.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTIONFACE 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: BUTYL-RUBBER MINIMUM LAYER THICKNESS: 0.3 MM BREAK THROUGH TIME: 236 MIN MATERIAL TESTED:BUTOJECT (KCL 897, 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	COMPLETE SUIT PROTECTING AGAINST CHEMICALS, 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 PROTECTION	WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIESAPPEARANCEColorless to pale yellow liquid

ODOUD	
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	
POINT/FREEZING POINT	
INITIAL BOILING POINT	145 - 147 °C
AND BOILING RANGE	
FLASH POINT	38 °C
EVAPOURATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID,	NO DATA AVAILABLE
GAS)	
UPPER/LOWER	NO DATA AVAILABLE
FLAMMABILITY OR	
EXPLOSIVE LIMITS	
VAPOUR PRESSURE	13 HPA AT 20 C
VAPOUR DENSITY	3.39 - (AIR = 1.0)
RELATIVE DENSITY	0.84
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT:	NO DATA AVAILABLE
N- OCTANOL/WATER	
AUTO-IGNITION	NO DATA AVAILABLE
TEMPERATURE	
DECOMPOSITION	NO DATA AVAILABLE
TEMPERATURE	
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	NO DATA AVAILABLE

OTHER SAFETY INFORMATION

RELATIVE VAPOUR 3.39 - (AIR = 1.0) DENSITY

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	NO DATA AVAILABLE
CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS	NO DATA AVAILABLE
CONDITIONS TO AVOID	HEAT, FLAMES AND SPARKS.
INCOMPATIBLE MATERIALS	OXIDIZING AGENTS, STRONG BASES, STRONG REDUCING AGENTS
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 - 780 MG/KG REMARKS: (RTECS)

INHALATION: NO DATA AVAILABLE

LD50 DERMAL - RABBIT - 600 MG/KG REMARKS: (RTECS)

NO DATA AVAILABLE

SKIN	SKIN - RABBIT
CORROSION/IRRITATION	RESULT: SLIGHT IRRITATION
	REMARKS: (RTECS)

SERIOUS EYE SLIGHT IRRITATION DAMAGE/EYE IRRITATION

RESPIRATORY OR SKIN NO DATA AVAILABLE **SENSITISATION**

GERM CELL NO DATA AVAILABLE MUTAGENICITY

CARCINOGENICITYIARC:NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS
GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS

ACGIH:

NTP:

OSHA:

GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.

CARCINOGEN BY IARC.

PROBABLE, POSSIBLE OR CONFIRMED HUMAN

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS

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 LEVELS

GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY ACGIH.

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

SPECIFIC TARGET ORGAN
TOXICITY - SINGLEACUTE INHALATION TOXICITY - SHORTNESS OF BREATH,
COUGH, MUCOSAL IRRITATIONSEXPOSURECOUGH, MUCOSAL IRRITATIONS

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	RTECS: MP5900000
	TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL,
	PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT
	BEEN THOROUGHLY INVESTIGATED.
	AFTER ABSORPTION:
	WE HAVE NO DESCRIPTION OF ANY TOXIC SYMPTOMS.
	OTHER DANGEROUS PROPERTIES CAN NOT BE

OTHER DANGEROUS PROPERTIES CAN NOT BE EXCLUDED. HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY	NO DATA AVAILABLE
PERSISTENCE AND DEGRADABILITY	NO DATA AVAILABLE
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	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:	ALDEHYDES, FLAMMABLE, TOXIC, N.O.S. (trans-2-Hexen-1-al)
UN NUMBER:	1988
CLASS:	3 (6.1)
PACKING GROUP: REPORTABLE QUANTITY (RQ):	III
POISON INHALATION HAZARD:	NO
IMDG	
PROPER SHIPPING NAME:	ALDEHYDES, FLAMMABLE, TOXIC, N.O.S. (<i>trans-2-</i> Hexen-1-al)
UN NUMBER:	1988
CLASS:	3 (6.1)
PACKING GROUP:	III
EMS-NO:	F-E, S-D
IATA PROPER SHIPPING NAME:	ALDEHYDES, FLAMMABLE, TOXIC, N.O.S. (trans-2-Hexen-1-
	al)
UN NUMBER:	1988
CLASS:	3 (6.1)
PACKING GROUP:	III

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 COMPONENTSTHIS 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

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

NEW JERSEY RIGHT TO KNOW COMPONENTS		
trans-2-Hexen-1-al	6728-26-3	
	NO.	REVISION DATE
	CAS-	REVISION DATE

	CAS-NO.	REVISION DATE
trans-2-Hexen-1-al	6728-26-3	
CALIFORNIA PROP. 65	THIS PRODUCT DOES NOT CO	NTAIN ANY CHEMICALS
COMPONENTS	KNOWN TO STATE OF CALIFO	RNIA TO CAUSE CANCER,
	BIRTH DEFECTS, OR ANY OTH	ER REPRODUCTIVE HARM.

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEN	MENTS REFERRED TO UNDER SECTIONS 2 AND 3.
H226	FLAMMABLE LIQUID AND VAPOUR.
H302	HARMFUL IF SWALLOWED.
H311	TOXIC IN CONTACT WITH SKIN.
H317	MAY CAUSE AN ALLERGIC SKIN REACTION.

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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