Chem-Impex International Inc.

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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	37616
NAME:	Acitretin
SYNONYMS:	(2ε,4ε,6ε,8ε)-9-(4-Methoxy-2,3,6-trimethylphenyl)-3,7- dimethylnona-2,4,6,8-tetraenoic acid 9-(4-Methoxy-2,3,6-trimethylphenyl)-3,7-dimethylnona- 2,4,6,8-tetraenoic acid
24 HOUR EMERGENCY	(800) 535-5053(USA)
TELEPHONE:	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) SKIN IRRITATION (CATEGORY 2), H315 EYE IRRITATION (CATEGORY 2A), H319

REPRODUCTIVE TOXICITY (CATEGORY 1B), H360 SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 1), H400 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 1), H410

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)

H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION
H360	MAY DAMAGE FERTILITY OR THE UNBORN CHILD.
H410	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING
	EFFECTS.

PRECAUTIONARY STATEMENT(S)

OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE
BEEN READ AND UNDERSTOOD.
WASH SKIN THOROUGHLY AFTER HANDLING.
AVOID RELEASE TO THE ENVIRONMENT.
WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE
PROTECTION.
IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL
MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND
EASY TO DO. CONTINUE RINSING.
IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/
ATTENTION.
SPECIFIC TREATMENT (SEE SUPPLEMENTAL FIRST AID
INSTRUCTIONS ON THIS LABEL).
IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/
ATTENTION.
IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/
ATTENTION.
TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE
REUSE.
COLLECT SPILLAGE.
STORE LOCKED UP.
DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED
WASTE DISPOSAL PLANT.
NONE

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: C	C ₂₁ H ₂₆ O ₃
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MW: 326.44

CAS-NO. 55079-83-9

PURITY: $\geq 98\%$ (HPLC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Acitretin		
	SKIN IRRIT. 2; EYE IRRIT. 2A; REPR. 1B; AQUATIC ACUTE 1; AQUATIC CHRONIC 1; H315, H319, H360, H400, H410 M-FACTOR - AQUATIC ACUTE:	<= 100 %
	10	

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. 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	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 ANDSPECIAL TREATMENTNEEDED

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA	USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.
EATINGUISHING WEDIA	CHEMICAL OR CARBON DIOAIDE.
SPECIAL HAZARDS ARISING FROM THE	CARBON OXIDES
SUBSTANCE OR MIXTURE	
A DVICE FOD	
ADVICE FOR FIREFIGHTERS	WEAR SELF CONTAINED BREATHING APPARATUS FOR FIRE FIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	USE PERSONAL PROTECTIVE EQUIPMENT. AVOID DUST FORMATION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST.
ENVIRONMENTAL PRECAUTIONS	FOR PERSONAL PROTECTION SEE SECTION 8. PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	PICK UP AND ARRANGE DISPOSAL WITHOUT CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST AND AEROSOLS. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED.NORMAL MEASURES FOR PREVENTIVE FIRE PROTECTION. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. LIGHT SENSITIVE. STORE UNDER INERT GAS. MOISTURE SENSITIVE.
	Store at <0°C
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	HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL
ENGINEERING	HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE
CONTROLS	BREAKS AND AT THE END OF WORKDAY.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACESAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TOPROTECTIONEN166 USE EQUIPMENT FOR EYE PROTECTION TESTED ANDAPPROVED UNDER APPROPRIATE GOVERNMENTSTANDARDS 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. FULL CONTACT MATERIAL: NITRILE RUBBER MINIMUM LAYER THICKNESS: 0.11 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED: DERMATRIL (KCL 740, SIZE M) SPLASH CONTACT MATERIAL: NITRILE RUBBER MINIMUM LAYER THICKNESS: 0.11 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED: DERMATRIL (KCL 740, 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. IMPERVIOUS CLOTHING, THE TYPE OF PROTECTIVE **BODY PROTECTION** EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE. WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORY PROTECTION **RESPIRATORS ARE APPROPRIATE USE A FULLFACE** PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) 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** PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO ENVIRONMENTAL SO. DO NOT LET PRODUCT ENTER DRAINS.

DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

EXPOSURE

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Light yellow to yellow to orange powder to crystal
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
РН	NO DATA AVAILABLE
MELTING	230 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT	
AND BOILING RANGE	
FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID,	NO DATA AVAILABLE
GAS)	
UPPER/LOWER	NO DATA AVAILABLE
FLAMMABILITY OR	
EXPLOSIVE LIMITS	
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	
WATER SOLUBILITY	0.00007 G/L AT 25 C
PARTITION COEFFICIENT:	LOG POW: 6.40
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	NO DATA AVAILABLE

OTHER SAFETY INFORMATION NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OFNO DATA AVAILABLE**HAZARDOUS**

REACTIONS

CONDITIONS TO AVOID NO DATA AVAILABLE

INCOMPATIBLE STRONG OXIDIZING AGENTS MATERIALS

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 - > 4,000 MG/KG
	INHALATION: NO DATA AVAILABLE
	DERMAL: NO DATA AVAILABLE
	NO DATA AVAILABLE
SKIN CORROSION/IRRITATION	MODERATE SKIN IRRITATION
SERIOUS EYE DAMAGE/EYE IRRITATION	MODERATE EYE IRRITATION
RESPIRATORY OR SKIN SENSITISATION	NO DATA AVAILABLE
GERM CELL MUTAGENICITY	NO DATA AVAILABLE
CARCINOGENICITY	
IARC:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.
ACGIH:	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.
NTP:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED
OSHA:	CARCINOGEN BY NTP. NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.
DEDDODUCTIVE TOVICITY	DDESUMED HUMAN DEDDODUCTIVE TOXICANT

REPRODUCTIVE TOXICITY PRESUMED HUMAN REPRODUCTIVE TOXICANT

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	RTECS: NOT AVAILABLE
	COUGH, WHEEZING, RESPIRATORY DISTRESS, DIARRHOEA

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES TOXICITY TO ALGAE	EC0 - DAPHNIA MAGNA (WATER FLEA) - < 0.2 MG/L - 48.0 H EC50 - DESMODESMUS SUBSPICATUS (GREEN ALGAE) - > 1.2 MG/L - 72.0 H
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	AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL. VERY TOXIC TO AQUATIC LIFE.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT	OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS
	TO A LICENSED DISPOSAL COMPANY. CONTACT A
	LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE
	TO DISPOSE OF THIS MATERIAL.

CONTAMINATEDDISPOSE OF AS UNUSED PRODUCT.PACKAGING

SECTION 14. TRANSPORT INFORMATION

DOT (US)	NOT DANGEROUS GOODS
IMDG	
PROPER SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	SOLID, N.O.S. (Acitretin)
UN NUMBER:	3077
CLASS:	9
PACKING GROUP:	III
EMS-NO:	F-A, S-F
MARINE POLLUTANT:	YES
IATA	
PROPER SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	SOLID, N.O.S. (Acitretin)
UN NUMBER:	3077
CLASS:	9
PACKING GROUP:	III

FURTHER INFORMATION:

EHS-MARK REQUIRED (IMDG CODE 2.10.3) FOR SINGLE PACKAGINGS AND COMBINATION PACKAGINGS CONTAINING INNER PACKAGINGS WITH DANGEROUS GOODS > 5L FOR LIQUIDS OR > 5KG FOR SOLIDS.

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	ACUTE HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

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

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

	CAS-NO.	R
Acitretin	55079-83-9	

CAS-NO.

55079-83-9

REVISION DATE

NEW JERSEY RIGHT TO KNOW COMPONENTS

REVISION DATE

CALIFORNIA PROP. 65 COMPONENTS

Acitretin

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.

H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION
H360	MAY DAMAGE FERTILITY OR THE UNBORN CHILD.
H410	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING
	EFFECTS.

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)
IN ADODITA NIT.	

IMPORTANT:

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