Chem-Impex International Inc.

Tel: (630) 766-2112 E-mail: <u>sales@chemimpex.com</u> Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 USA

Fax: (630) 766-2218 Web site: <u>www.chemimpex.com</u> Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191 USA

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	46299
NAME:	3,3,3-Trifluoro-1-propanol
SYNONYMS:	
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 3), H226 SKIN CORROSION/IRRITATION (CATEGORY 2), H315 EYE DAMAGE/IRRITATION (CATEGORY 2A), H319 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 VAPOR
H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION.

PRECAUTIONARY STATEMENT(S)

ridente rioranti o m	
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.
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P280	WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE
	PROTECTION.
P302 + P352	IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL
	MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND
	EASY TO DO. CONTINUE RINSING.
P332 + P313	IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/
	ATTENTION.
P337 + P313	IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/
	ATTENTION.
P362	TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE
	REUSE.
P403 + P235	STORE IN A WELL-VENTILATED PLACE. KEEP COOL.
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED
	WASTE DISPOSAL PLANT.
HAZARDS NOT	NONE
OTHERWISE	
CLASSIFIED (HNOC)	
OD NOT COVEDED	

OR NOT COVERED BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MW:	114.07
CAS-NO.	2240-88-2
PURITY:	\geq 98% (GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
3,3,3-Trifluoro-1-propanol		
	-	-

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	REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. GET MEDICAL ADVICE/ATTENTION IF YOU FEEL UNWELL.
IN CASE OF SKIN CONTACT	REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. GENTLY WASH WITH PLENTY OF SOAP AND WATER. IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION.
IN CASE OF EYE CONTACT	RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION.
IF SWALLOWED	GET MEDICAL ADVICE/ATTENTION IF YOU FEEL UNWELL. RINSE MOUTH.
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED	ACUTE: REDNESS. 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	NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA	SUITABLE EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM, WATER SPRAY, CARBON DIOXIDE.	
	UNSUITABLE EXTINGUISHING MEDIA: SOLID STREAMS OF WATER	
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	CARBON OXIDES HALOGENATED COMPOUNDS	
ADVICE FOR FIREFIGHTERS	WEAR SELF-CONTAINED BREATHING APPARATUS IF POSSIBLE.	
FURTHER INFORMATION	WARNING: HIGHLY TOXIC HF GAS IS PRODUCED DURING COMBUSTION. TAKE CARE AS IT MAY DECOMPOSE UPON COMBUSTION OR IN HIGH TEMPERATURES TO GENERATE POISONOUS FUME.	

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL	USE EXTRA PERSONAL PROTECTIVE EQUIPMENT
PRECAUTIONS,	(SELF-CONTAINED BREATHING APPARATUS). KEEP
PROTECTIVE	PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK.
EQUIPMENT AND	ENSURE ADEQUATE VENTILATION. ENTRY TO NON-
EMERGENCY	INVOLVED PERSONNEL SHOULD BE CONTROLLED
PROCEDURES	AROUND THE LEAKAGE AREA BY ROPING OFF, ETC.
ENVIRONMENTAL	PREVENT PRODUCT FROM ENTERING DRAINS.
PRECAUTIONS METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	ABSORB SPILLED MATERIAL IN DRY SAND OR INERT ABSORBENT BEFORE RECOVERING IT INTO AN AIRTIGHT CONTAINER. IN CASE OF LARGE AMOUNT OF SPILLAGE, CONTAIN A SPILL BY BUNDING. ADHERED OR COLLECTED MATERIAL SHOULD BE PROMPTLY DISPOSED OF, IN ACCORDANCE WITH APPROPRIATE LAWS AND REGULATIONS.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	HANDLING IS PERFORMED IN A WELL VENTILATED PLACE. WEAR SUITABLE PROTECTIVE EQUIPMENT. PREVENT GENERATION OF VAPOUR OR MIST. KEEP AWAY FROM HEAT/SPARKS/OPEN FLAME/HOT SURFACESNO SMOKING. TAKE MEASURES TO PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE. USE EXPLOSION-PROOF EQUIPMENT. WASH HANDS AND FACE THOROUGHLY AFTER HANDLING. USE A CLOSED SYSTEM IF POSSIBLE. USE A VENTILATION, LOCAL EXHAUST IF VAPOUR OR AEROSOL WILL BE GENERATED. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED. STORE IN A COOL, DARK AND WELL-VENTILATED PLACE. STORE AWAY FROM INCOMPATIBLE MATERIALS SUCH AS OXIDIZING AGENTS.
SPECIFIC END USE(S)	Store at 2 - 8 °C 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	FOLLOW SAFE INDUSTRIAL
ENGINEERING	ENGINEERING/LABORATORY PRACTICES WHEN
CONTROLS	HANDLING ANY CHEMICAL. INSTALL A CLOSED
	SYSTEM OR LOCAL EXHAUST. ALSO INSTALL SAFETY
	SHOWER AND EYE BATH.

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 PROTECTIONHANDLE 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 PROTECTIONIMPERVIOUS 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.

RESPIRATORYVAPOR RESPIRATOR. FOLLOW LOCAL AND NATIONAL**PROTECTION**REGULATIONS.

CONTROL OFPREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TOENVIRONMENTALDO SO. DO NOT LET PRODUCT ENTER DRAINS.EXPOSUREContemporation

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES		
APPEARANCE	Colorless to almost colorless clear liquid	
ODOUR	NO DATA AVAILABLE	
ODOUR THRESHOLD	NO DATA AVAILABLE	
PH	NO DATA AVAILABLE	
MELTING		
POINT/FREEZING POINT		
INITIAL BOILING POINT	100 °C	
AND BOILING RANGE		
FLASH POINT	37 °C	
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	1.30	
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 NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE
	CONDITIONS.

POSSIBILITY OFNO SPECIAL REACTIVITY HAS BEEN REPORTED.**HAZARDOUSREACTIONS**

CONDITIONS TO AVOID SPARK, OPEN FLAME, STATIC DISCHARGE

INCOMPATIBLE OXIDIZING AGENTS MATERIALS

HAZARDOUSCARBON DIOXIDE, CARBON MONOXIDE, HYDROGENDECOMPOSITIONFLUORIDE

SECTION 11. TOXICOLOGICAL INFORMATION

PRODUCTS

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	NO DATA AVAILABLE
	INHALATION: NO DATA AVAILABLE
	DERMAL: NO DATA AVAILABLE
	NO DATA AVAILABLE
SKIN CORROSION/IRRITATION	NO DATA AVAILABLE

SERIOUS EYE DAMAGE/EYE IRRITATION	NO DATA AVAILABLE
RESPIRATORY OR SKIN SENSITISATION	NO DATA AVAILABLE
GERM CELL MUTAGENICITY	NO DATA AVAILABLE
CARCINOGENICITY IARC: NTP: OSHA:	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. 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 ON OSHA S LIST OF REGULATED CARCINOGENS.
REPRODUCTIVE TOXICITY	NO DATA AVAILABLE
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
	TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

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	NO DATA AVAILABLE
OTHER ADVERSE EFFECTS	NO DATA AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT

OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS
TO A LICENSED DISPOSAL COMPANY. BURN IN A
CHEMICAL INCINERATOR EQUIPPED WITH AN
AFTERBURNER AND SCRUBBER BUT EXERT EXTRA
CARE IN IGNITING AS THIS MATERIAL IS HIGHLY
FLAMMABLE. CONTACT A LICENSED PROFESSIONAL
WASTE DISPOSAL SERVICE TO DISPOSE OF THIS
MATERIAL.

CONTAMINATED DISPOSE OF AS UNUSED PRODUCT. PACKAGING

SECTION 14. TRANSPORT INFORMATION

DOT (US) PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP:	ALCOHOLS, N.O.S (3,3,3-Trifluoro-1-propanol) 1987 3 III
IMDG PROPER SHIPPING NAME: UN NUMBER:	ALCOHOLS, N.O.S (3,3,3-Trifluoro-1-propanol) 1987
CLASS: PACKING GROUP:	3 III
EMS NUMBER: IATA	F-E, S-D
PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP:	ALCOHOLS, N.O.S (3,3,3-Trifluoro-1-propanol) 1987 3 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 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.

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

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
3,3,3-Trifluoro-1-propanol	2240-88-	
	2	

NEW JERSEY RIGHT TO KNOW COMPONENTS CAS-NO.

3,3,3-Trifluoro-1-propanol	
-,-,-	

2240-88-2

REVISION DATE

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3. H226 FLAMMABLE LIQUID AND VAPOR

I LAWIWADEL EIQUID AND VALOR
CAUSES SKIN IRRITATION.
CAUSES SERIOUS EYE IRRITATION.

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:		
THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE		
BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO		

WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR

IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. IN NO EVENT SHALL CII BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF CII HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

VERSION: 3.2.

REVISION DATE: 3/23/2022