# Chem-Impex International Inc.

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# SAFETY DATA SHEET

#### SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 45260

NAME: Methyl 2-fluoroacrylate (stabilized with BHT)

SYNONYMS: 2-Fluoroacrylic acid methyl ester (stabilized with BHT)

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 3), H301

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (CATEGORY 1), H372

# SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 2), H401 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 2), H411

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.

H301 TOXIC IF SWALLOWED.

H372 CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE: ORGANS

H401 TOXIC TO AQUATIC LIFE

H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

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.

P260 DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/

SPRAY.

P264 WASH SKIN THOROUGHLY AFTER HANDLING.

P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS

PRODUCT

P273 AVOID RELEASE TO THE ENVIRONMENT.

P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE

PROTECTION/ FACE PROTECTION.

P301 + P310 + P330 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER /

DOCTOR. RINSE MOUTH.

P303 + P361 + P353 IF ON SKIN (OR HAIR); REMOVE/ TAKE OFF IMMEDIATELY

ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/

SHOWER.

P314 GET MEDICAL ADVICE/ ATTENTION IF YOU FEEL UNWELL

P391 COLLECT SPILLAGE.

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 NONE.

**OTHERWISE** 

CLASSIFIED (HNOC)

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

MF:  $C_4H_5FO_2$ 

MW: 104.08

CAS-NO. 2343-89-7

PURITY:  $\geq$  98% (GC)

#### HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Methyl 2-fluoroacrylate (stabilized with BHT)		
	-	-

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.

REMOVE/TAKE OFF IMMEDIATELY ALL IN CASE OF SKIN

**CONTACT** CONTAMINATED CLOTHING. GENTLY WASH WITH

PLENTY OF SOAP AND WATER. IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION.

IN CASE OF EYE

RINSE CAUTIOUSLY WITH WATER FOR SEVERAL **CONTACT** MINUTES. REMOVE CONTACT LENSES, IF PRESENT

AND EASY TO DO. CONTINUE RINSING. IF EYE

IRRITATION PERSISTS: GET MEDICAL

ADVICE/ATTENTION.

IF SWALLOWED IMMEDIATELY CALL A POISON CENTER OR

DOCTOR/PHYSICIAN. RINSE MOUTH.

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** SUITABLE EXTINGUISHING MEDIA:

**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.

THIS SUBSTANCE MAY POLIMERIZE EXPLOSIVELY
WHEN HEATED OR INVOLVED IN A FIRE. CONTAINER
MAY EXPLODE WHEN HEATED. COMBAT FIRE FROM A

SHELTERED POSITION. TAKE CARE AS IT MAY DECOMPOSE UPON COMBUSTION OR IN HIGH TEMPERATURES TO GENERATE POISONOUS FUME.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL
PRECAUTIONS,
PROTECTIVE
EQUIPMENT AND
EMERGENCY
PROCEDURES

USE EXTRA PERSONAL PROTECTIVE EQUIPMENT (SELF-CONTAINED BREATHING APPARATUS). KEEP PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK. ENSURE ADEQUATE VENTILATION. ENTRY TO NON-INVOLVED PERSONNEL SHOULD BE CONTROLLED AROUND THE LEAKAGE AREA BY ROPING OFF, ETC.

**ENVIRONMENTAL PRECAUTIONS** 

BE CAREFUL NOT TO LET IT FLOW INTO RIVERS, ETC., SINCE ADVERSE EFFECTS ON THE ENVIRONMENT ARE

CONCERNED.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP** 

ABSORB SPILLED MATERIAL IN DRY SAND OR INERT ABSORBENT BEFORE RECOVERING IT INTO A

COVERED 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.

REFERENCE TO OTHER **SECTIONS** 

FOR DISPOSAL SEE SECTION 13.

#### SECTION 7. HANDLING AND STORAGE

HANDLING

PRECAUTIONS FOR SAFE HANDLING IS PERFORMED IN A WELL VENTILATED PLACE. WEAR SUITABLE PROTECTIVE EOUIPMENT. PREVENT GENERATION OF VAPOUR OR MIST. KEEP AWAY FROM HEAT/SPARKS/OPEN FLAME/HOT SURFACES. -NO 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 LOCKED UP.

STORE AWAY FROM INCOMPATIBLE MATERIALS SUCH

AS OXIDIZING AGENTS.

Store at 2 - 8 °C

SPECIFIC END USE(S)

APART FROM THE USES MENTIONED IN SECTION 1.2

NO OTHER SPECIFIC USES ARE STIPULATED

#### EXPOSURE CONTROLS/PERSONAL PROTECTION SECTION 8.

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 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** COMPLETE SUIT PROTECTING AGAINST CHEMICALS.

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

WORKPLACE.

**RESPIRATORY** HALF OR FULL FACEPIECE RESPIRATOR, SELF-

**PROTECTION** CONTAINED BREATHING APPARATUS(SCBA), SUPPLIED

AIR RESPIRATOR, ETC. USE RESPIRATORS APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS AND

FOLLOW LOCAL AND NATIONAL REGULATIONS.

CONTROL OF

ENVIRONMENTAL

**EXPOSURE** 

DO NOT LET PRODUCT ENTER DRAINS.

# 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

BOILING POINT 91 °C FLASH POINT 1 °C

EVAPOURATION 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 1.12

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 POLYMERIZATION MAY OCCUR UNDER THE

INFLUENCES OF HEAT, LIGHT OR ON CONTACT WITH POLYMERIZATION INITIATORS SUCH AS PEROXIDES

ETC.

POSSIBILITY OF HAZARDOUS REACTIONS

NO SPECIAL REACTIVITY HAS BEEN REPORTED.

CONDITIONS TO AVOID HEAT, SPARK, OPEN FLAME, STATIC DISCHARGE, LIGHT

INCOMPATIBLE MATERIALS OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN

FLUORIDE

# SECTION 11. TOXICOLOGICAL INFORMATION

#### INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY NO DATA AVAILABLE

INHALATION: NO DATA AVAILABLE

DERMAL: NO DATA AVAILABLE

NO DATA AVAILABLE

**SKIN** NO DATA AVAILABLE

**CORROSION/IRRITATION** 

DAMAGE/EYE IRRITATION

SERIOUS EYE NO DATA AVAILABLE

RESPIRATORY OR SKIN NO DATA AVAILABLE

GERM CELL NO DATA AVAILABLE MUTAGENICITY

**CARCINOGENICITY** 

**SENSITISATION** 

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.

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** 

NO DATA AVAILABLE

SPECIFIC TARGET ORGAN TOXICITY - REPEATED

**EXPOSURE** 

CAUSES DAMAGE TO ORGANS THROUGH

PROLONGED OR REPEATED EXPOSURE: ORGANS

**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** 

FISH: 96H LC50:6.1 MG/L (ONCORHYNCHUS MYKISS)

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. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN

AFTERBURNER AND SCRUBBER.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

#### SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: FLAMMABLE LIQUIDS, TOXIC, N.O.S (Methyl 2-

fluoroacrylate (stabilized with BHT))

UN NUMBER: 1992 CLASS: 3 (6.1) PACKING GROUP: II

**IMDG** 

PROPER SHIPPING NAME: FLAMMABLE LIQUIDS, TOXIC, N.O.S (Methyl 2-

fluoroacrylate (stabilized with BHT))

UN NUMBER: 1992 CLASS: 3 (6.1) PACKING GROUP: II EMS-NO: F-E, S-D

**IATA** 

PROPER SHIPPING NAME: FLAMMABLE LIQUIDS, TOXIC, N.O.S (Methyl 2-

fluoroacrylate (stabilized with BHT))

UN NUMBER: 1992 CLASS: 3 (6.1) 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.

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Methyl 2-fluoroacrylate 2343-89-7

(stabilized with BHT)

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Methyl 2-fluoroacrylate 2343-89-7

(stabilized with BHT)

NEW JERSEY RIGHT TO KNOW COMPONENTS

**OTHER INFORMATION** 

CAS-NO. REVISION DATE

Methyl 2-fluoroacrylate 2343-89-7

(stabilized with BHT)

**SECTION 16.** 

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

H225 HIGHLY FLAMMABLE LIQUID AND VAPOUR.

H301 TOXIC IF SWALLOWED.

H372 CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE: ORGANS

H401 TOXIC TO AQUATIC LIFE

H411 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)

IMPORTANT:

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