Chem-Impex International Inc.

Tel: (630) 766-2112 E-mail: sales@chemimpex.com Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 USA Fax: (630) 766-2218 Web site: www.chemimpex.com Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191 USA

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

| CATALOG #: | 45365 |
|---------------------------------|---|
| NAME: | 3-(Trifluoromethoxy)benzoyl chloride |
| 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 4), H227 CORROSIVE TO METALS (CATEGORY 1), H290 SKIN CORROSION/IRRITATION (CATEGORY 1B), H314 EYE DAMAGE/IRRITATION (CATEGORY 1), H318 FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS PICTOGRAM

| PICTOGRAM | |
|---|---|
| SIGNAL WORD | DANGER |
| HAZARD STATEMENT(| S) |
| H227 | COMBUSTIBLE LIQUID. |
| H290 | MAY BE CORROSIVE TO METALS. |
| H314 | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. |
| PRECAUTIONARY STAT | TEMENT(S) |
| P210 | KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT |
| | SURFACES. NO SMOKING. |
| P234 | KEEP ONLY IN ORIGINAL CONTAINER. |
| P260 | DO NOT BREATHE DUSTS OR MISTS |
| P264 | WASH SKIN THOROUGHLY AFTER HANDLING. |
| P280 | WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE |
| | PROTECTION/ FACE PROTECTION. |
| P301 + P330 + P331 | IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING. |
| P303 + P361 + P353 | IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL |
| | CONTAMINATED CLOTHING. RINSE SKIN WITH |
| | WATER/SHOWER. |
| P304 + P340 + P310 | IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP |
| | COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A |
| D205 - D251 - D220 - | POISON CENTER/DOCTOR. |
| P305 + P351 + P338 + | IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL |
| P310 | MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND |
| | EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A |
| P310 | POISON CENTER/DOCTOR. IMMEDIATELY CALL A POISON CENTER OR DOCTOR |
| P363 | WASH CONTAMINATED CLOTHING BEFORE REUSE. |
| P303 P370 + P378 | IN CASE OF FIRE: USE DRY CHEMICAL, DRY SAND OR FOAM |
| r 5/0 + r 5/8 | TO EXTINGUISH. |
| P390 | ABSORB SPILLAGE TO PREVENT MATERIAL DAMAGE. |
| P403 + P235 | STORE IN A WELL-VENTILATED PLACE. KEEP COOL. |
| P405 | STORE LOCKED UP. |
| P406 | STORE IN CORROSIVE RESISTANT BOTTLE OR METAL |
| | CONTAINER WITH A RESISTANT INNER LINER. |
| P501 | DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED |
| | WASTE DISPOSAL PLANT. |
| HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS | MAY DEVELOP PRESSURE |
| GIID | |

MF: $C_8H_4ClF_3O_2$

MW: 224.56

CAS-NO. 86270-03-3

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

HAZARDOUS COMPONENTS

| COMPONENT | CLASSIFICATION | CONCENTRATION |
|--------------------------------------|----------------|---------------|
| 3-(Trifluoromethoxy)benzoyl chloride | | |
| | - | - |

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. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. |
| IN CASE OF SKIN CONTACT | REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. GENTLY WASH WITH PLENTY OF SOAP AND WATER. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. |
| IN CASE OF EYE CONTACT | RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO.CONTINUE RINSING.IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. |
| IF SWALLOWED | IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. RINSE MOUTH. DO NOT INDUCE VOMITING. |
| MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED | ACUTE: PAIN. 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 | NO DATA AVAILABLE |

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

| SUITABLE EXTINGUISHING MEDIA | SUITABLE EXTINGUISHING MEDIA: DRY CHEMICAL, CARBON DIOXIDE. |
|---|--|
| | UNSUITABLE EXTINGUISHING MEDIA: 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 HCL GAS IS PRODUCED DURING COMBUSTION. 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 PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES | USE PERSONAL PROTECTIVE EQUIPMENT. 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 | PREVENT PRODUCT FROM ENTERING DRAINS. |
| METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP | ABSORB SPILLED MATERIAL IN A SUITABLE ABSORBENT (E.G. RAG, DRY SAND, EARTH, SAW-DUST). 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 FLAMES AND HOT SURFACES. 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. MAY DEVELOP PRESSURE. OPEN CAREFULLY. USE CORROSIVE RESISTANT EQUIPMENT. |
|--|--|
| CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES | KEEP CONTAINER TIGHTLY CLOSED. STORE IN A COOL, DARK AND WELL-VENTILATED PLACE. STORE UNDER INERT GAS. PROTECT FROM MOISTURE. STORE LOCKED UP. STORE AWAY FROM INCOMPATIBLE MATERIALS SUCH AS OXIDIZING AGENTS. MOISTURE-SENSITIVE 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 | FOLLOW SAFE INDUSTRIAL ENGINEERING/LABORATORY |
|-------------|--|
| ENGINEERING | PRACTICES WHEN HANDLING ANY CHEMICAL. INSTALL |
| CONTROLS | 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.
- RESPIRATORYHALF OR FULL FACEPIECE RESPIRATOR, SELF-
CONTAINED BREATHING APPARATUS (SCBA), SUPPLIED
AIR RESPIRATOR, ETC.
USE RESPIRATORS APPROVED UNDER APPROPRIATE
GOVERNMENT STANDARDS AND FOLLOW LOCAL AND
NATIONAL REGULATIONS.
- CONTROL OFPREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TOENVIRONMENTALDO SO. DO NOT LET PRODUCT ENTER DRAINS.EXPOSUREDO SO. 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 |
| РН | NO DATA AVAILABLE |
| MELTING | |
| POINT/FREEZING POINT | |
| INITIAL BOILING POINT | |
| AND BOILING RANGE | |
| FLASH POINT | 79 °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 | 1.43 |
|------------------------|-------------------|
| 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 OF HAZARDOUS REACTIONS | DECOMPOSES IN CONTACT WITH WATER AND LIBERATES TOXIC GASES. |
| CONDITIONS TO AVOID | OPEN FLAME, MOISTURE |
| INCOMPATIBLE MATERIALS | OXIDIZING AGENTS, BASES |
| HAZARDOUS DECOMPOSITION PRODUCTS | CARBON DIOXIDE, CARBON MONOXIDE, HYDROGEN FLUORIDE, HYDROGEN CHLORIDE |

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 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: | 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 | 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 NO DATA AVAILABLE **ASSESSMENT**

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: | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S (3- (Trifluoromethoxy)benzoyl chloride) |
| UN NUMBER: | 3265 |
| CLASS: | 8 |
| PACKING GROUP: | П |
| IMDG | |
| PROPER SHIPPING NAME: | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S (3- (Trifluoromethoxy)benzoyl chloride) |
| UN NUMBER: | 3265 |
| CLASS: | 8 |
| PACKING GROUP: | II |
| EMS-NO: | F-A, S-B |
| IATA | |
| PROPER SHIPPING NAME: | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S (3- (Trifluoromethoxy)benzoyl chloride) |
| UN NUMBER: | 3265 |
| CLASS: | 8 |
| PACKING GROUP: | П |

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-(Trifluoromethoxy)benzoyl | 86270-03- | |
| chloride | 3 | |
| | | |

NEW JERSEY RIGHT TO KNOW COMPONENTS

| | CAS-NO. | REVISION DATE |
|-----------------------------|-----------|----------------------|
| 3-(Trifluoromethoxy)benzoyl | 86270-03- | |
| chloride | 3 | |
| | | |

SECTION 16. OTHER INFORMATION

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

| H227 | COMBUSTIBLE LIQUID. |
|------|--|
| H290 | MAY BE CORROSIVE TO METALS. |
| H314 | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. |

| 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 BI | ELIEVED TO BE ACCURATE AND REPRESENTS THE BEST |

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: 10/28/2021