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 #: | 41506 |
|---------------------------------|---|
| NAME: | (S)-1-Boc-3-(methylamino)piperidine |
| SYNONYMS: | (S)-(+)-1-Boc-3-(methylamino)piperidine |
| 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) ACUTE TOXICITY, ORAL(CATEGORY 3), H301 EYE IRRITATION (CATEGORY 2A), H319 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

| GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS PICTOGRAM | | |
|---|---|--|
| | | |
| SIGNAL WORD | DANGER | |
| HAZARD STATEMENT(| | |
| H301 | TOXIC IF SWALLOWED. | |
| H319 | CAUSES SERIOUS EYE IRRITATION. | |
| H410 | VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. | |
| PRECAUTIONARY STA | TEMENT(S) | |
| 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/ EYE PROTECTION/ FACE | |
| | PROTECTION. | |
| P301 + P310 | IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER/ | |
| | DOCTOR. | |
| P305 + P351 + P338 | IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL | |
| | MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND | |
| | EASY TO DO. CONTINUE RINSING. | |
| P321 | SPECIFIC TREATMENT (SEE SUPPLEMENTAL FIRST AID | |
| | INSTRUCTIONS ON THIS LABEL). | |
| P330 | RINSE MOUTH. | |
| P337 + P313 | IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ | |
| | ATTENTION. | |
| P391 | COLLECT SPILLAGE. | |
| P405 | STORE LOCKED UP. | |
| P501 | DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED | |
| | WASTE DISPOSAL PLANT. | |
| HAZARDS NOT OTHERWISE | NONE | |

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| MF: C ₁ | $_{11}H_{22}N_2O_2$ |
|--------------------|---------------------|
|--------------------|---------------------|

MW: 214.30

CAS-NO. 912368-73-1

PURITY: $\geq 96.5\%$ (GC)

HAZARDOUS COMPONENTS

| COMPONENT | CLASSIFICATION | CONCENTRATION |
|-------------------------------------|------------------------------|---------------|
| (S)-1-Boc-3-(methylamino)piperidine | | |
| | ACUTE TOX. 3; EYE IRRIT. 2A; | <= 100 % |
| | AQUATIC ACUTE 1; AQUATIC | |
| | CHRONIC 1; H301, H319, H400, | |
| | H410 | |
| | M-FACTOR - AQUATIC ACUTE: | |
| | 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. 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 | NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN. |
| MOST IMPORTANT | THE MOST IMPORTANT KNOWN SYMPTOMS AND |
| SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED | 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 EXTINGUISHING MEDIA | USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE. |
|---|---|
| SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE | CARBON OXIDES, NITROGEN OXIDES (NOX) COMBUSTIBLE. |
| ADVICE FOR FIREFIGHTERS | WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY. |
| FURTHER INFORMATION | NO DATA AVAILABLE |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES | WEAR RESPIRATORY PROTECTION. AVOID DUST FORMATION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST. FOR PERSONAL PROTECTION SEE SECTION 8. |
|--|--|
| ENVIRONMENTAL PRECAUTIONS | 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 | AVOID CONTACT WITH SKIN AND EYES. AVOID |
|----------------------|---|
| HANDLING | FORMATION OF DUST AND AEROSOLS. |

PROVIDE APPROPRIATE EXHAUST VENTILATION AT
PLACES WHERE DUST IS FORMED.
FOR PRECAUTIONS SEE SECTION 2.2.CONDITIONS FOR SAFE
STORAGE, INCLUDING
ANY INCOMPATIBILITIESKEEP CONTAINER TIGHTLY CLOSED IN A DRY AND
WELL-VENTILATED PLACE.
HANDLE UNDER NITROGEN, PROTECT FROM
MOISTURE. STORE UNDER NITROGEN.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 | HANDS BEFORE BREAKS AND IMMEDIATELY AFTER |
| CONTROLS | HANDLING THE PRODUCT. |

PERSONAL PROTECTIVE EQUIPMENT

| EYE/FACE | FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR |
|------------|--|
| PROTECTION | EYE PROTECTION TESTED AND APPROVED UNDER |
| | APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH |
| | (US) OR EN 166(EU). |

- SKINHANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIORPROTECTIONTO 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.
- BODYCOMPLETE SUIT PROTECTING AGAINST CHEMICALS, THEPROTECTIONTYPE 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 FULLFACE PARTICLE RESPIRATOR TYPE N99 (US) OR TYPE P2 (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. |
| EXPOSURE | DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| INFORMATION ON DASIC | I II I SICALAND CHEMICALI KO |
|------------------------|------------------------------|
| APPEARANCE | Colorless to yellow liquid |
| ODOUR | NO DATA AVAILABLE |
| ODOUR THRESHOLD | NO DATA AVAILABLE |
| PH | NO DATA AVAILABLE |
| MELTING | |
| POINT/FREEZING POINT | |
| INITIAL BOILING POINT | |
| AND BOILING RANGE | |
| FLASH POINT | 110 °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 | 0.985 at 25 °C |
| WATER SOLUBILITY | NO DATA AVAILABLE |
| PARTITION COEFFICIENT: | LOG POW: 2.036 |
| 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 |
| INFORMATION | |

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 | NO DATA AVAILABLE |
| INCOMPATIBLE MATERIALS | NO DATA AVAILABLE |
| HAZARDOUS DECOMPOSITION PRODUCTS | HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS CARBON OXIDES, NITROGEN OXIDES (NOX) OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE IN THE EVENT OF FIRE: SEE SECTION 5 |

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: ACGIH: | 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 INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL |
|---|--|
| NTP: | CARCINOGEN BY ACGIH. 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. |
| REPRODUCTIVE TOXICITY | NO DATA AVAILABLE |
| | |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE | NO DATA AVAILABLE |
| TOXICITY - SINGLE | NO DATA AVAILABLE NO DATA AVAILABLE |
| TOXICITY - SINGLE EXPOSURE SPECIFIC TARGET ORGAN TOXICITY - REPEATED | |
| TOXICITY - SINGLE EXPOSURE SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE | NO DATA AVAILABLE |

SECTION 12. ECOLOGICAL INFORMATION

| ΤΟΧΙCITY | 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 ASSESSMENTPBT/VPVB ASSESSMENT NOT AVAILABLE AS
CHEMICAL SAFETY ASSESSMENT NOT
REQUIRED/NOT CONDUCTEDOTHER ADVERSE EFFECTSAN 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

PRODUCTOFFER 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.

CONTAMINATEDDISPOSE OF AS UNUSED PRODUCT.PACKAGING

SECTION 14. TRANSPORT INFORMATION

| DOT (US) PROPER SHIPPING NAME: | TOXIC SOLID, ORGANIC, N.O.S. ((S)-1-Boc-3- (methylamino)piperidine) |
|--|--|
| UN NUMBER: | 2811 |
| CLASS: | 6.1 |
| PACKING GROUP: | III |
| REPORTABLE QUANTITY | |
| (RQ): | |
| POISON INHALATION | NO |
| HAZARD: | |
| IMDG | |
| PROPER SHIPPING NAME: | TOXIC SOLID, ORGANIC, N.O.S. ((S)-1-Boc-3- (methylamino)piperidine) |
| UN NUMBER: | 2811 |
| CLASS: | 6.1 |
| PACKING GROUP: | III |
| EMS-NO: | F-A, S-A |
| | |

| PROPER SHIPPING NAME: | TOXIC SOLID, ORGANIC, N.O.S. ((S)-1-Boc-3- (methylamino)piperidine) |
|-----------------------|--|
| UN NUMBER: | 2811 |
| CLASS: | 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 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

(S)-1-Boc-3-(methylamino)piperidine CAS-NO. 912368-73-1 **REVISION DATE**

NEW JERSEY RIGHT TO KNOW COMPONENTS

(S)-1-Boc-3-(methylamino)piperidine CAS-NO. 912368-73-1 **REVISION DATE**

CALIFORNIA PROP. 65 COMPONENTS

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH, OR ANY OTHER REPRODUCTIVE DEFECTS.

SECTION 16. OTHER INFORMATION

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

H301 TOXIC IF SWALLOWED.

H319 CAUSES SERIOUS EYE IRRITATION.

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) |

IMPORTANT:

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