Chem-Impex International Inc.

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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	30719
NAME:	(<i>R</i>)-(-)-2-Methylpiperazine
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 SOLIDS (CATEGORY 1), H228 SKIN IRRITATION (CATEGORY 2), H315 EYE IRRITATION (CATEGORY 2A), H319 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, H335 FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM



SIGNAL WORDDANGERHAZARD STATEMENT(S)H228FLAMMABLE SOLID.H315CAUSES SKIN IRRITATION.H319CAUSES SERIOUS EYE IRRITATION.H335MAY CAUSE RESPIRATORY IRRITATION.

PRECAUTIONARY STAT	EMENT(S)
P210	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES.
	- NO SMOKING.
P240	GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.
P241	USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/
	LIGHTING/ EQUIPMENT.
P261	AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/ SPRAY.
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P280	WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE
	PROTECTION/ FACE PROTECTION.
P302 + P352	IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
P304 + P340	IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST
	IN A POSITION COMFORTABLE FOR BREATHING.
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL
	MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY
	TO DO. CONTINUE RINSING.
P312	CALL A POISON CENTER OR DOCTOR/ PHYSICIAN IF YOU FEEL
	UNWELL.
P321	SPECIFIC TREATMENT (SEE SUPPLEMENTAL FIRST AID
	INSTRUCTIONS ON THIS LABEL).
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.
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR
	ALCOHOL-RESISTANT FOAM FOR EXTINCTION.
P403 + P233	STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER
	TIGHTLY CLOSED.
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: $C_5H_{12}N_2$

MW: 100.16

CAS-NO. 75336-86-6

PURITY: $\geq 99\%$ (GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
(<i>R</i>)-(-)-2-Methylpiperazine		
	FLAM. SOL. 1; SKIN IRRIT. 2;	-
	EYE IRRIT. 2A; STOT SE 3; H228,	
	H315, H319, H335	
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	DO NOT INDUCE VOMITING. 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)

EFFECTS, BOTH ACUTE AND/OR IN SECTION 11 **AND DELAYED**

INDICATION OF ANYNO DATA AVAILABLEIMMEDIATE MEDICALATTENTION AND SPECIALTREATMENT NEEDED

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)
ADVICE FOR FIREFIGHTERS	WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.
FURTHER INFORMATION	USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

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. REMOVE ALL SOURCES OF IGNITION. 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.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	SWEEP UP AND SHOVEL. CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WETBRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE SECTION 13). KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL. CONTAIN SPILLAGE, PICK UP WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING AND TRANSFER TO A CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (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.KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.TAKE MEASURES TO PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL- VENTILATED PLACE. HYGROSCOPIC.
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	CONTAINS NO SUBSTANCES WITH OCCUPATIONAL
WORKPLACE CONTROL	EXPOSURE LIMIT VALUES.
PARAMETERS	

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/FACE PROTECTIONSAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TO
EN166 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. 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.
BODY PROTECTION	IMPERVIOUS 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.
RESPIRATORY PROTECTION	WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE 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 ENVIRONMENTAL EXPOSURE	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

ADDEAD ANCE	White to light collow emotalling neuroder
APPEARANCE	White to light yellow crystalline powder
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	91-93 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT	
AND BOILING RANGE	
FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID,	THE SUBSTANCE OR MIXTURE IS A FLAMMABLE SOLID
GAS)	WITH THE CATEGORY 1.
UPPER/LOWER	NO DATA AVAILABLE
FLAMMABILITY OR	
EXPLOSIVE LIMITS	
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT:	LOG POW: -0.745
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	HEAT, FLAMES AND SPARKS. EXTREMES OF TEMPERATURE AND DIRECT SUNLIGHT.

INCOMPATIBLE MATERIALS

STRONG OXIDIZING AGENTS, STRONG ACIDS

HAZARDOUSOTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLEDECOMPOSITIONIN THE EVENT OF FIRE: SEE SECTION 5PRODUCTSPRODUCTS

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS ACUTE TOXICITY NO DATA AVAILABLE DERMAL: NO DATA AVAILABLE NO DATA AVAILABLE SKIN NO DATA AVAILABLE **CORROSION/IRRITATION** SERIOUS EYE NO DATA AVAILABLE **DAMAGE/EYE IRRITATION RESPIRATORY OR SKIN** NO DATA AVAILABLE SENSITISATION GERM CELL NO DATA AVAILABLE MUTAGENICITY 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 EOUAL 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 CARCINOGEN BY NTP. NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS OSHA: GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY OSHA **REPRODUCTIVE TOXICITY** NO DATA AVAILABLE SPECIFIC TARGET ORGAN INHALATION - MAY CAUSE RESPIRATORY IRRITATION. **TOXICITY - SINGLE EXPOSURE**

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	RTECS: NOT AVAILABLE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY TOXICITY TO FISH	LC50 - PIMEPHALES PROMELAS (FATHEAD MINNOW) - 2,900 MG/L - 96 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	NO DATA AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

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

SECTION 14. TRANSPORT INFORMATION

DOT (US)	
PROPER SHIPPING NAME:	FLAMMABLE SOLIDS, ORGANIC, N.O.S.((R)-(-)-2-
	Methylpiperazine)
UN NUMBER:	1325
CLASS:	4.1
PACKING GROUP:	II
MARINE POLLUTANT:	NO
POISON INHALATION	NO
HAZARD:	
IMDG	
PROPER SHIPPING NAME:	FLAMMABLE SOLIDS, ORGANIC, N.O.S.((<i>R</i>)-(-)-2-
	Methylpiperazine)
UN NUMBER:	1325
CLASS:	4.1
PACKING GROUP:	II
EMS-NO:	F-A, S-G
MARINE POLLUTANT:	NO
IATA	
PROPER SHIPPING NAME:	FLAMMABLE SOLIDS, ORGANIC, N.O.S.((R)-(-)-2-
	Methylpiperazine)
UN NUMBER:	1325
CLASS:	4.1
PACKING GROUP:	II

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS		ATERIAL ARE SUBJECT TO THE TS OF SARA TITLE III, SECTION
SARA 313 COMPONENTS	THIS MATERIAL DOES NOT COMPONENTS WITH KNOW EXCEED THE THRESHOLD (LEVELS ESTABLISHED BY S	N CAS NUMBERS THAT
SARA 311/312 HAZARDS	FIRE HAZARD, ACUTE HEA	LTH HAZARD
MASSACHUSETTS RIGHT TO KNOW COMPONENTS	NO COMPONENTS ARE SUB MASSACHUSETTS RIGHT T	
PENNSYLVANIA RIGHT TO KNOW COMPONENTS CAS-NO. REVISION DATE		
(R)-(-)-2-Methylpiperazine	75336-86-6	

NEW JERSEY RIGHT TO KNOW COMPONENTS

(<i>R</i>)-(-)-2-Methylpiperazine	CAS-NO. 75336-86-6	REVISION DATE
CALIFORNIA PROP. 65 COMPONENTS	THIS PRODUCT DOES NOT CO KNOWN TO STATE OF CALIFO BIRTH DEFECTS, OR ANY OT	ORNIA TO CAUSE CANCER,

SECTION 16. OTHER INFORMATION

	FATEME	NTS REFERRED TO UNDER SECTIONS 2 AND 3.
EYE IRRIT.		EYE IRRITATION
FLAM. SOL.		FLAMMABLE SOLIDS
H228		FLAMMABLE SOLID.
H315		CAUSES SKIN IRRITATION.
H319		CAUSES SERIOUS EYE IRRITATION.
H335		MAY CAUSE RESPIRATORY IRRITATION.
SKIN IRRIT.		SKIN IRRITATION
STOT SE		SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
HMIS RATING		
HEALTH HAZARD:		2
CHRONIC HEALTH F	IAZARD:	
FLAMMABILITY:		0
PHYSICAL HAZARD		3
NFPA RATING		
HEALTH HAZARD:		2
FIRE HAZARD:		2
REACTIVITY HAZAF	RD:	3
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	

TLV: IMPORTANT:

PEL:

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