Chem-Impex International Inc.

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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	01234
NAME:	Hexamethylenetetramine
SYNONYMS:	Hexamine Urotropine
24 HOUR EMERGENCY	(800) 535-5053(USA)
TELEPHONE:	352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER SERVICE:	(630) 766-2112
SERVICE.	

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS) FLAMMABLE SOLIDS (CATEGORY 2), H228 SKIN SENSITISATION (CATEGORY 1), H317 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)		
H228	FLAMMABLE SOLID.	
H317	MAY CAUSE AN ALLERGIC SKIN REACTION.	
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.	
P272	CONTAMINATED WORK CLOTHING SHOULD NOT BE	
	ALLOWED OUT OF THE WORKPLACE.	
P280	WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE	
	PROTECTION.	
P302 + P352	IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.	
P333 + P313	IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL	
	ADVICE/ ATTENTION.	
P363	WASH CONTAMINATED CLOTHING BEFORE REUSE.	
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR	
	ALCOHOL-RESISTANT FOAM FOR EXTINCTION.	
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED	
	WASTE DISPOSAL PLANT.	
HAZADDO NOT	NONE	
HAZARDS NOT	NONE	

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:	C ₆ H ₁	2 ^N 4		
MW:	140.2			
CAS-NO.	100-9	07-0		
PURITY: 99 - 100% HEXAMETHYLENETETRAMINE				
HAZARDOUS COMPONENTS				
COMPONENT		CLASSIFICATION	CONCENTRATION	

HEXAMETHYLENETETRAMINE

FLAM. SOL. 2; SKIN SENS. 1;	<= 100 %
H228, H317	

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	FLUSH EYES WITH WATER AS A PRECAUTION.
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 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	USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY
EXTINGUISHING MEDIA	CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS	CARBON OXIDES, NITROGEN OXIDES (NOX),
ARISING FROM THE	HYDROGEN CYANIDE (HYDROCYANIC ACID)
SUBSTANCE OR MIXTURE	
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	USE PERSONAL PROTECTIVE EQUIPMENT. AVOID
PRECAUTIONS,	DUST FORMATION. AVOID BREATHING VAPOURS, MIST
PROTECTIVE	OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE
EQUIPMENT AND	ALL SOURCES OF IGNITION. EVACUATE PERSONNEL
EMERGENCY	TO SAFE AREAS. AVOID BREATHING DUST. FOR
PROCEDURES	PERSONAL PROTECTION SEE SECTION 8.
ENVIRONMENTAL	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE
PRECAUTIONS	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 WET- BRUSHING 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).
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.FURTHER
	PROCESSING OF SOLID MATERIALS MAY RESULT IN
	THE FORMATION OF COMBUSTIBLE DUSTS. THE
	POTENTIAL FOR COMBUSTIBLE DUST FORMATION
	SHOULD BE TAKEN INTO CONSIDERATION BEFORE
	ADDITIONAL PROCESSING OCCURS.
	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, INCLUDINGKEEP CONTAINER TIGHTLY CLOSED IN A DRY AND
WELL-VENTILATED PLACE.
HYGROSCOPIC
STORAGE CLASS (TRGS 510): FLAMMABLE SOLID
HAZARDOUS MATERIALSSPECIFIC 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 WITHCONTAINS NO SUBSTANCES WITH OCCUPATIONALWORKPLACE CONTROLEXPOSURE LIMIT VALUES.PARAMETERSEXPOSURE LIMIT VALUES.

EXPOSURE CONTROLS

APPROPRIATE	HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL
ENGINEERING	HYGIENE AND SAFETY PRACTICE. WASH HANDS
CONTROLS	BEFORE BREAKS AND AT THE END OF WORKDAY.

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.
	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	COMPLETE SUIT PROTECTING AGAINST CHEMICALS, 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION	
OTHER SAFETY	NO DATA AVAILABLE
OXIDIZING PROPERTIES	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
TEMPERATURE	
DECOMPOSITION	NO DATA AVAILABLE
TEMPERATURE	
AUTO-IGNITION	NO DATA AVAILABLE
N- OCTANOL/WATER	
PARTITION COEFFICIENT:	NO DATA AVAILABLE
WATER SOLUBILITY	SOLUBLE
RELATIVE DENSITY	
VAPOUR DENSITY	NO DATA AVAILABLE
VAPOUR PRESSURE	< 0.01 HPA (< 0.01 MMHG) AT 20 C
EXPLOSIVE LIMITS	
FLAMMABILITY OR	
UPPER/LOWER	NO DATA AVAILABLE
GAS)	WITH THE CATEGORY 2.
FLAMMABILITY (SOLID,	THE SUBSTANCE OR MIXTURE IS A FLAMMABLE SOLID
EVAPORATION RATE	NO DATA AVAILABLE
FLASH POINT	250 °C
AND BOILING RANGE	
INITIAL BOILING POINT	
POINT/FREEZING POINT	200°C (Lit.)
MELTING	280 °C (Lit.)
PH	NO DATA AVAILABLE NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE NO DATA AVAILABLE
ODOUR	NO DATA AVAILABLE
APPEARANCE	White granular powder

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	EXPOSURE TO MOISTURE. HEAT, FLAMES AND SPARKS.
INCOMPATIBLE MATERIALS	STRONG ACIDS, ACIDS, STRONG OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION PRODUCTS	OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS		
ACUTE TOXICITY	LD50 ORAL - RAT - > 20,000 MG/KG INHALATION: NO DATA AVAILABLE DERMAL: NO DATA AVAILABLE	
SKIN CORROSION/IRRITATION	NO DATA AVAILABLE	
SERIOUS EYE DAMAGE/EYE IRRITATION	NO DATA AVAILABLE	
RESPIRATORY OR SKIN SENSITISATION	MAXIMISATION TEST (GPMT) - GUINEA PIG MAY CAUSE ALLERGIC SKIN REACTION.	
GERM CELL MUTAGENICITY	LABORATORY EXPERIMENTS HAVE SHOWN MUTAGENIC EFFECTS.	
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 EQUAL 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.	
OSHA:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS 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 TOXICITY - SINGLE EXPOSURE	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	RTECS: MN4725000 TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. LIVER - IRREGULARITIES - BASED ON HUMAN EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY TOXICITY TO FISH TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES	LC50 - PIMEPHALES PROMELAS (FATHEAD MINNOW) - 49,800 MG/L - 96 H EC50 - DAPHNIA MAGNA (WATER FLEA) - 36,000 MG/L - 48 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: UN NUMBER: CLASS: PACKING GROUP: REPORTABLE QUANTITY (RQ):	HEXAMETHYLENETETRAMINE 1328 4.1 III
POISON INHALATION	NO
HAZARD:	
IMDG PROPER SHIPPING NAME: UN NUMBER:	HEXAMETHYLENETETRAMINE 1328
CLASS:	4 1
PACKING GROUP:	III
EMS-NO:	F-A, S-G
IATA	
PROPER SHIPPING NAME:	HEXAMETHYLENETETRAMINE
UN NUMBER:	1328
CLASS:	
PACKING GROUP:	4.1 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 (DEMINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS	FIRE HAZARD, CHRONIC HEALTH HAZARD		
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	
Hexamethylenetetramine	100-97-0	3/1/2007	
NEW JERSEY RIGHT TO KNOW COMPONENTS			
	CAS-NO.	REVISION DATE	
Hexamethylenetetramine	100-97-0	3/1/2007	
CALIFORNIA PROP. 65 COMPONENTS	THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.		

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEME FLAM. SOL. H228 H317 SKIN SENS.		ENTS REFERRED TO UNDER SECTIONS 2 AND 3. FLAMMABLE SOLIDS FLAMMABLE SOLID. MAY CAUSE AN ALLERGIC SKIN REACTION. SKIN SENSITISATION
HMIS RATING		
HEALTH HAZARD:		0
CHRONIC HEALTH		*
HAZARD:		_
FLAMMABILITY:		2
PHYSICAL HAZARD)	2
NFPA RATING		
HEALTH HAZARD:		0
FIRE HAZARD:		1
REACTIVITY HAZA	RD:	2
MSDS LEGEND		
MW:	MOLEC	CULAR WEIGHT
MF:	MOLEC	ULAR FORMULA
VOC:	VOLAT	ILE ORGANIC COMPOUNDS
ACGIH:	AMERI	CAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL
	HYGIN	ISTS
CAS:	CHEMI	CAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA:	OCCUP	ATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMIS	SSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRES	HOLD LIMIT VALUE (ACGIH)
IMPORTANT:		

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