

# *Chem-Impex International Inc.*

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## SAFETY DATA SHEET

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### SECTION 1. CHEMICAL IDENTIFICATION

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CATALOG #:	36642
NAME:	Pyridinium tribromide
SYNONYMS:	Pyridine hydrobromide perbromide Pyridine perbromide hydrobromide
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

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#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)**  
SKIN CORROSION (CATEGORY 1B), H314

SERIOUS EYE DAMAGE (CATEGORY 1), H318  
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 WORD DANGER

**HAZARD STATEMENT(S)**

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.  
H335 MAY CAUSE RESPIRATORY IRRITATION.

**PRECAUTIONARY STATEMENT(S)**

P260 DO NOT BREATHE DUST OR MIST.  
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.  
P301 + P330 + P331 IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE  
VOMITING.  
P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY  
ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/  
SHOWER.  
P304 + P340 + P310 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.  
P305 + P351 + P338 +  
P310 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL  
MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND  
EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A  
POISON CENTER/DOCTOR.  
P363 WASH CONTAMINATED CLOTHING BEFORE REUSE.  
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  
OTHERWISE  
CLASSIFIED (HNO)  
OR NOT COVERED  
BY GHS** LACHRYMATOR

MF: C<sub>5</sub>H<sub>5</sub>N·HBr·Br<sub>2</sub>  
 MW: 319.82  
 CAS-NO. 39416-48-3  
 PURITY: 89 - 111% (Assay by titration)

**HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION
<b>Pyridinium tribromide</b>		
	SKIN CORR. 1B; EYE DAM. 1; STOT SE 3; H314, H318, H335	<= 100%

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**

<b>GENERAL ADVICE</b>	CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.
<b>IF INHALED</b>	IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.
<b>IN CASE OF SKIN CONTACT</b>	TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.
<b>IN CASE OF EYE CONTACT</b>	RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN. CONTINUE RINSING EYES DURING TRANSPORT TO HOSPITAL.
<b>IF SWALLOWED</b>	DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.
<b>MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED</b>	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11
<b>INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND</b>	NO DATA AVAILABLE

**SPECIAL TREATMENT  
NEEDED**

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**SECTION 5. FIRE AND EXPLOSION DATA**

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**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),  
HYDROGEN BROMIDE GAS  
COMBUSTIBLE.

**ADVICE FOR  
FIREFIGHTERS** WEAR SELF-CONTAINED BREATHING APPARATUS FOR  
FIREFIGHTING IF NECESSARY.

**FURTHER INFORMATION** NO DATA AVAILABLE

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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**PERSONAL  
PRECAUTIONS,  
PROTECTIVE  
EQUIPMENT AND  
EMERGENCY  
PROCEDURES** USE PERSONAL PROTECTIVE EQUIPMENT. 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** DO NOT LET PRODUCT ENTER DRAINS.

**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.

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**SECTION 7. HANDLING AND STORAGE**

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<b>PRECAUTIONS FOR SAFE HANDLING</b>	AVOID CONTACT WITH SKIN AND EYES. AVOID 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. FOR PRECAUTIONS SEE SECTION 2.2.
<b>CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES</b>	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.  Store at RT
<b>SPECIFIC END USE(S)</b>	APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED

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

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### **CONTROL PARAMETERS**

#### **COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

### **EXPOSURE CONTROLS**

#### **APPROPRIATE ENGINEERING CONTROLS**

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS 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, 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 FULLFACE 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**

DO NOT LET PRODUCT ENTER DRAINS.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE Orange to red crystalline powder

ODOUR NO DATA AVAILABLE

ODOUR THRESHOLD NO DATA AVAILABLE

PH NO DATA AVAILABLE

MELTING 128 - 136 °C

POINT/FREEZING POINT

INITIAL BOILING POINT

AND BOILING RANGE

FLASH POINT

EVAPORATION RATE NO DATA AVAILABLE

FLAMMABILITY (SOLID,

GAS)

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: 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

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**SECTION 10. STABILITY AND REACTIVITY**

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**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), HYDROGEN BROMIDE GAS  
OTHER DECOMPOSITION PRODUCTS - NO DATA  
AVAILABLE  
IN THE EVENT OF FIRE: SEE SECTION 5

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**SECTION 11. TOXICOLOGICAL INFORMATION**

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**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**

CAUSES SERIOUS EYE DAMAGE.

**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



<b>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</b>	MAY CAUSE RESPIRATORY IRRITATION.
<b>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</b>	NO DATA AVAILABLE
<b>ASPIRATION HAZARD</b>	NO DATA AVAILABLE
<b>ADDITIONAL INFORMATION</b>	RTECS: NOT AVAILABLE  COUGH, SHORTNESS OF BREATH, HEADACHE, NAUSEA, VOMITING

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**SECTION 12. ECOLOGICAL INFORMATION**

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<b>TOXICITY</b>	NO DATA AVAILABLE
<b>PERSISTENCE AND DEGRADABILITY</b>	NO DATA AVAILABLE
<b>BIOACCUMULATIVE POTENTIAL</b>	NO DATA AVAILABLE
<b>MOBILITY IN SOIL</b>	NO DATA AVAILABLE
<b>RESULTS OF PBT AND VPVB ASSESSMENT</b>	PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED
<b>OTHER ADVERSE EFFECTS</b>	NO DATA AVAILABLE

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**SECTION 13. DISPOSAL CONSIDERATIONS**

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**WASTE TREATMENT METHODS**

<b>PRODUCT</b>	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.
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**CONTAMINATED  
PACKAGING**

DISPOSE OF AS UNUSED PRODUCT.

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**SECTION 14. TRANSPORT INFORMATION**

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**DOT (US)**

PROPER SHIPPING NAME: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.  
(PYRIDINIUM TRIBROMIDE)  
UN NUMBER: 3261  
CLASS: 8  
PACKING GROUP: II  
REPORTABLE QUANTITY  
(RQ):  
POISON INHALATION HAZARD: NO

**IMDG**

PROPER SHIPPING NAME: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.  
(PYRIDINIUM TRIBROMIDE)  
UN NUMBER: 3261  
CLASS: 8  
PACKING GROUP: II  
EMS-NO: F-A, S-B

**IATA**

PROPER SHIPPING NAME: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.  
(PYRIDINIUM TRIBROMIDE)  
UN NUMBER: 3261  
CLASS: 8  
PACKING GROUP: II

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**SECTION 15. REGULATORY INFORMATION**

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**SARA 302 COMPONENTS** THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS WITH A SECTION 302 EHS TPQ.

**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**

	CAS-NO.	REVISION DATE
Pyridinium tribromide	39416-48-3	

**NEW JERSEY RIGHT TO KNOW COMPONENTS**

	CAS-NO.	REVISION DATE
Pyridinium tribromide	39416-48-3	

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**SECTION 16. OTHER INFORMATION**

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

H314	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
H335	MAY CAUSE RESPIRATORY IRRITATION.

MSDS LEGEND

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL 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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