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 #	:	36484
NAME:		Cetylpyridinium bromide hydrate
SYNONYMS	:	1-Hexadecylpyridinium bromide
24 HOUR EN TELEPHONI		(800) 535-5053(USA) 352-323-3500 (INTERNATIONAL)
TO REQUES	T 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 4), H302 ACUTE TOXICITY, INHALATION (CATEGORY 2), H330 SKIN IRRITATION (CATEGORY 2), H315 EYE IRRITATION (CATEGORY 2A), H319 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, H335 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 4), H413

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)

H302	HARMFUL IF SWALLOWED.
H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION.
H330	FATAL IF INHALED.
H335	MAY CAUSE RESPIRATORY IRRITATION.
H413	MAY CAUSE LONG LASTING HARMFUL EFFECTS TO
	AQUATIC LIFE.

PRECAUTIONARY STATEMENT(S)

I KECAUTIONAKI STA	$\mathbf{H} = \mathbf{H} \mathbf{H} \mathbf{H} \mathbf{H} \mathbf{H} \mathbf{H} \mathbf{H} \mathbf{H}$
P260	DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/
	SPRAY.
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS
	PRODUCT.
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P273	AVOID RELEASE TO THE ENVIRONMENT.
P280	WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE
	PROTECTION.
P284	WEAR RESPIRATORY PROTECTION.
P301 + P312	IF SWALLOWED: CALL A POISON CENTER/DOCTOR IF YOU
	FEEL UNWELL.
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.
P310	IMMEDIATELY CALL A POISON CENTER/DOCTOR.
P320	SPECIFIC TREATMENT IS URGENT (SEE SUPPLEMENTAL
	FIRST AID INSTRUCTIONS ON THIS LABEL).
P330	RINSE MOUTH.
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.
P403 + P233	STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER
	TIGHTLY CLOSED.
P405	STORE LOCKED UP.

DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

HAZARDS NOT NONE OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

I ₃₈ BrN·xH ₂ O
[₃₈]

MW: 384.44

CAS-NO. 202869-92-9

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

COMPONENT	CLASSIFICATION	CONCENTRATION
Cetylpyridinium brou	mide hydrate	
	ACUTE TOX. 4; ACUTE TOX.	2; <= 100 %
	SKIN IRRIT. 2; EYE IRRIT. 2A	,
	STOT SE 3; AQUATIC CHRON	NIC
	4; H302, H330, H315, H319,	
	H335, H413	

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 ADVICECONSULT A PHYSICIAN. SHOW THIS SAFETY DATA
SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT
OF DANGEROUS AREA.IF INHALEDIF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF
NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.
CONSULT A PHYSICIAN.IN CASE OF SKIN
CONTACTWASH OFF WITH SOAP AND PLENTY OF WATER. TAKE
VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A
PHYSICIAN.

P501

IN CASE OF EYE	RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT
CONTACT	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 ARE DESCRIBED IN THE LABELLING (SEE
EFFECTS, BOTH ACUTE AND DELAYED	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 BROMIDE GAS
SUBSTANCE OR MIXTURE	COMBUSTIBLE.
ADVICE FOR	WEAR SELF-CONTAINED BREATHING APPARATUS FOR
FIREFIGHTERS	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	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE
PRECAUTIONS	TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

METHODS AND	PICK UP AND ARRANGE DISPOSAL WITHOUT
MATERIALS FOR	CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN
CONTAINMENT AND	SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.
CLEANING UP	

REFERENCE TO OTHER FOR DISPOSAL SEE SECTION 13. **SECTIONS**

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.NORMAL MEASURES FOR PREVENTIVE FIRE PROTECTION. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.
SPECIFIC END USE(S)	HYGROSCOPIC KEEP IN A DRY PLACE. Store at RT 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	AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
ENGINEERING	WASH HANDS BEFORE BREAKS AND IMMEDIATELY
CONTROLS	AFTER HANDLING THE PRODUCT.

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	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

APPEARANCE	Off-white or pale yellow powder
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
РН	NO DATA AVAILABLE
MELTING	67 - 71 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT	
AND BOILING RANGE	
FLASH POINT	
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	
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT:	LOG POW: 1.83
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	NO DATA AVAILABLE
CONDITIONS TO AVOID	NO DATA AVAILABLE

INCOMPATIBLE MATERIALS	STRONG OXIDIZING AGENTS
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

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY

SKIN

SERIOUS EYE

LD50 ORAL - RAT - 475 MG/KG INHALATION: NO DATA AVAILABLE

LD50 DERMAL - RAT - > 7,200 MG/KG

NO DATA AVAILABLE

NO DATA AVAILABLE

CORROSION/IRRITATION

NO DATA AVAILABLE

DAMAGE/EYE IRRITATION

RESPIRATORY OR SKIN NO DATA AVAILABLE

SENSITISATION

GERM CELL HUMAN MUTAGENICITY LYMPHOCYTE DNA INHIBITION

CARCINOGENICITY IARC:

ACGIH:

NTP:

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 COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL 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 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	INHALATION - MAY CAUSE RESPIRATORY IRRITATION.
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	RTECS: UU4848000
	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 ANDNO DATA AVAILABLE**DEGRADABILITY**

BIOACCUMULATIVE POTENTIAL

BIOACCUMULATION PIMEPHALES PROMELAS (FATHEAD MINNOW) - 7 D -9.8 G/L

BIOCONCENTRATION FACTOR (BCF): 1,100

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT ANDPBT/VPVB ASSESSMENT NOT AVAILABLE ASVPVB ASSESSMENTCHEMICAL SAFETY ASSESSMENT NOTREQUIRED/NOT CONDUCTED

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. 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.

CONTAMINATED DISPOSE OF AS UNUSED PRODUCT. PACKAGING

SECTION 14. TRANSPORT INFORMATION

DOT (US) PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP: POISON INHALATION HAZARD:	TOXIC SOLIDS, ORGANIC, N.O.S. (CETYLPYRIDINIUM BROMIDE HYDRATE) 2811 6.1 II NO
IMDG	TOXIC SOLIDS, ORGANIC, N.O.S. (CETYLPYRIDINIUM
PROPER SHIPPING NAME:	BROMIDE HYDRATE)
UN NUMBER:	2811
CLASS:	6.1
PACKING GROUP:	II
EMS-NO:	F-A, S-A
IATA	TOXIC SOLIDS, ORGANIC, N.O.S. (CETYLPYRIDINIUM
PROPER SHIPPING NAME:	BROMIDE HYDRATE)
UN NUMBER:	2811
CLASS:	6.1
PACKING GROUP:	II

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	NO COMPONENTS ARE SUBJECT TO THE
TO KNOW COMPONENTS	MASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

Cetylpyridinium bromide hydrate

CAS-NO. 202869-92-9

REVISION DATE

NEW JERSEY RIGHT TO KNOW COMPONENTS

Cetylpyridinium bromide hydrate CAS-NO. 202869-92-9 **REVISION DATE**

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-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H302	HARMFUL IF SWALLOWED.
H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION.
H330	FATAL IF INHALED.
H335	MAY CAUSE RESPIRATORY IRRITATION.
H413	MAY CAUSE LONG LASTING HARMFUL EFFECTS TO
	AQUATIC LIFE.

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 ABO	OVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST
INFORMATION CURREN	ITLY 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: 3.1.

REVISION DATE: 01/27/2017