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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 31836

NAME: 6-Bromo-2,2'-bipyridine

SYNONYMS: 6-Bromo-2,2'-bipyridyl

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 SKIN IRRITATION (CATEGORY 2), H315 SERIOUS EYE DAMAGE (CATEGORY 1), H318 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, H335 ACUTE AQUATIC TOXICITY (CATEGORY 3), H402 CHRONIC AQUATIC TOXICITY (CATEGORY 3), H412 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)

H301 TOXIC IF SWALLOWED.
 H315 CAUSES SKIN IRRITATION.
 H318 CAUSES SERIOUS EYE DAMAGE.

H335 MAY CAUSE RESPIRATORY IRRITATION.

H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

PRECAUTIONARY STATEMENT(S)

P261 AVOID BREATHING 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.

P301 + P310 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR

DOCTOR/PHYSICIAN.

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 OR DOCTOR/

PHYSICIAN.

P321 SPECIFIC TREATMENT (SEE SUPPLEMENTAL FIRST AID

INSTRUCTIONS ON THIS LABEL).

P330 RINSE MOUTH.

P332 + P313 IF SKIN IRRITATION OCCURS: 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.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED

WASTE DISPOSAL PLANT.

HAZARDS NOT NONE OTHERWISE

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: $C_{10}H_7BrN_2$

MW: 235.08

CAS-NO. 10495-73-5

PURITY: \geq 98%(GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
6-Bromo-2,2'-bipyridine		
	ACUTE TOX. 3; SKIN IRRIT. 2;	-
	EYE DAM. 1; STOT SE 3;	
	AQUATIC ACUTE 3; AQUATIC	
	CHRONIC 3; H301, H315, H318,	
	H335, H412	

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 WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE

CONTACT

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.

NEVER GIVE ANYTHING BY MOUTH TO AN IF SWALLOWED

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.

CARBON OXIDES, NITROGEN OXIDES (NOX), SPECIAL HAZARDS

ARISING FROM THE HYDROGEN BROMIDE GAS SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF CONTAINED BREATHING APPARATUS FOR

FIREFIGHTERS FIRE FIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL WEAR RESPIRATORY PROTECTION. AVOID BREATHING

VAPOURS, MIST OR GAS. ENSURE ADEQUATE PRECAUTIONS, **PROTECTIVE** VENTILATION. EVACUATE PERSONNEL TO SAFE

AREAS. **EQUIPMENT AND**

EMERGENCY FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL

PROCEDURES

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. **PRECAUTIONS** DISCHARGE INTO THE ENVIRONMENT MUST BE

AVOIDED.

METHODS AND MATERIALS FOR CONTAINMENT AND **CLEANING UP**

SOAK UP WITH INERT ABSORBENT MATERIAL AND DISPOSE OF AS HAZARDOUS WASTE, KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

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

INHALATION OF VAPOUR OR MIST.

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. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT

UPRIGHT TO PREVENT LEAKAGE.

Store at RT

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 PROTECTION

TIGHTLY FITTING SAFETY GOGGLES. FACESHIELD (8-INCH MINIMUM). 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.

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 WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING **PROTECTION** RESPIRATORS ARE APPROPRIATE USE A FULL-FACE

RESPIRATOR WITH MULTIPURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) 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, DISCHARGE INTO

THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White to light brown crystals
ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE

MELTING 74 °C

POINT/FREEZING POINT

INITIAL BOILING POINT 133 °C

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: 2.27

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 STRONG OXIDIZING AGENTS

MATERIALS

HAZARDOUS OTHER DECOMPOSITION PRODUCTS - NO DATA

DECOMPOSITION AVAILABLE

PRODUCTS 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 NO DATA AVAILABLE

CORROSION/IRRITATION

SERIOUS EYE NO DATA AVAILABLE

DAMAGE/EYE IRRITATION

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.

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

INHALATION - MAY CAUSE RESPIRATORY

IRRITATION.

SPECIFIC TARGET ORGAN

TOXICITY - REPEATED

EXPOSURE

NO DATA AVAILABLE

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL INFORMATION

RTECS: NOT AVAILABLE

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE

NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 12. ECOLOGICAL INFORMATION

NO DATA AVAILABLE

TOXICITY

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

AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL

HANDLING OR DISPOSAL. HARMFUL TO AQUATIC LIFE.

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 PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: TOXIC SOLIDS, ORGANIC, N.O.S. (6-Bromo-2,2'-

bipyridine)

UN NUMBER: 2811
CLASS: 6.1
PACKING GROUP: III
MARINE POLLUTANT: NO
POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: TOXIC SOLID, ORGANIC, N.O.S. (6-Bromo-2,2'-bipyridine

)

UN NUMBER: 2811
CLASS: 6.1
PACKING GROUP: III

EMS-NO: F-A, S-A

MARINE POLLUTANT: NO

IATA

PROPER SHIPPING NAME: TOXIC SOLID, ORGANIC, N.O.S. (6-Bromo-2,2'-bipyridine

)

UN NUMBER: 2811 CLASS: 6.1 PACKING GROUP: III

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS SARA 302: NO CHEMICALS IN THIS MATERIAL ARE

SUBJECT TO THE REPORTING REQUIREMENTS OF SARA

TITLE III, SECTION 302.

SARA 313 COMPONENTS SARA 313: 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

6-Bromo-2,2'-bipyridine 10495-73-5

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

6-Bromo-2,2'-bipyridine 10495-73-5

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.

ACUTE TOX. ACUTE TOXICITY

AQUATIC ACUTE ACUTE AQUATIC TOXICITY
AQUATIC CHRONIC CHRONIC AQUATIC TOXICITY

EYE DAM. SERIOUS EYE DAMAGE
H301 TOXIC IF SWALLOWED.
H315 CAUSES SKIN IRRITATION.

H318 CAUSES SERIOUS EYE DAMAGE.

H335 MAY CAUSE RESPIRATORY IRRITATION.

H402 HARMFUL TO AQUATIC LIFE.

HMIS RATING

HEALTH HAZARD: 2

CHRONIC HEALTH

HAZARD:

FLAMMABILITY: 0 PHYSICAL HAZARD 0

NFPA RATING

HEALTH HAZARD: 2 FIRE HAZARD: 0 REACTIVITY HAZARD: 0

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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