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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 07237

NAME: Brucine

SYNONYMS: 10,11-Dimethoxystrychnine

2,3-Dimethoxystrychnidin-10-one

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 2), H300 ACUTE TOXICITY, INHALATION (CATEGORY 2), H330 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)

H300 + H330FATAL IF SWALLOWED OR IF INHALED

H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

PRECAUTIONARY STATEMENT(S)

DO NOT BREATHE DUST/FUME/GAS/MIST/VAPOURS/ P260

SPRAY.

P264 WASH SKIN THOROUGHLY AFTER HANDLING.

P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS

PRODUCT.

USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA. P271

P273 AVOID RELEASE TO THE ENVIRONMENT.

P284 WEAR RESPIRATORY PROTECTION.

P301 + P310IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR

DOCTOR/ PHYSICIAN.

P304 + P340IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT

REST IN A POSITION COMFORTABLE FOR BREATHING.

P310 IMMEDIATELY CALL A POISON CENTER OR DOCTOR/

PHYSICIAN.

P320 SPECIFIC TREATMENT IS URGENT (SEE SUPPLEMENTAL

FIRST AID INSTRUCTIONS ON THIS LABEL).

P330 RINSE MOUTH.

P403 + P233STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER

TIGHTLY CLOSED.

P405 STORE LOCKED UP.

DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED P501

WASTE DISPOSAL PLANT.

HAZARDS NOT

OTHERWISE

CLASSIFIED (HNOC) OR NOT COVERED

BY GHS

NONE

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: $C_{23}H_{26}N_2O_4$

MW: 394.50 CAS-NO. 357-57-3

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

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Brucine	•	•
	ACUTE TOX. 2; AQUATIC	<= 100 %
	ACUTE 3; AQUATIC CHRONIC	
	3; H300 + H330, 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

CONTACT

WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE

VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A

PHYSICIAN.

IN CASE OF EYE

CONTACT

FLUSH EYES WITH WATER AS A PRECAUTION.

IF SWALLOWED 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

CARBON OXIDES, NITROGEN OXIDES (NOX)

EXTINGUISHING MEDIA CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS ARISING FROM THE

SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF-CONTAINED BREATHING APPARATUS FOR

FIREFIGHTERS FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL WEAR RESPIRATORY PROTECTION. AVOID DUST PRECAUTIONS, FORMATION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE **PROTECTIVE EQUIPMENT AND** PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST. FOR PERSONAL PROTECTION SEE SECTION 8.

EMERGENCY PROCEDURES

ENVIRONMENTAL PRECAUTIONS

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

AVOIDED.

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.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE AVOID CONTACT WITH SKIN AND EYES. AVOID HANDLING

FORMATION OF DUST AND AEROSOLS.

PROVIDE APPROPRIATE EXHAUST VENTILATION AT

PLACES WHERE DUST IS FORMED. FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND

STORAGE, INCLUDING WELL-VENTILATED PLACE.

ANY INCOMPATIBILITIES

KEEP IN A DRY PLACE.

APART FROM THE USES MENTIONED IN SECTION 1.2 **SPECIFIC END USE(S)**

NO OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL EXPOSURE LIMIT VALUES. **PARAMETERS**

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING **CONTROLS**

AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH HANDS BEFORE BREAKS AND IMMEDIATELY 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 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.
DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White powder

ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE
MELTING 175 - 178 °C (dec.)

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: 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

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 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 LD50 ORAL - MOUSE - 150 MG/KG

REMARKS: BEHAVIORAL: CONVULSIONS OR EFFECT

ON SEIZURE THRESHOLD. DERMAL: 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 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: EH8925000 CONVULSIONS

STOMACH - IRREGULARITIES - BASED ON HUMAN

EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY

TOXICITY TO FISH LC50 - LEPOMIS MACROCHIRUS - 36.0 MG/L - 96.0 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

AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL. HARMFUL TO AQUATIC

LIFE WITH LONG LASTING EFFECTS.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS **PRODUCT**

> 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: **BRUCINE** UN NUMBER: 1570 CLASS: 6.1 PACKING GROUP: 100 LBS

REPORTABLE QUANTITY

POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: BRUCINE UN NUMBER: 1570 CLASS: 6.1 PACKING GROUP: EMS-NO: F-A, S-A

IATA

PROPER SHIPPING NAME: **BRUCINE** UN NUMBER: 1570 CLASS: 6.1 PACKING GROUP: Ι

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

THE FOLLOWING COMPONENTS ARE SUBJECT TO **SARA 313 COMPONENTS**

REPORTING LEVELS ESTABLISHED BY SARA TITLE III,

SECTION 313:

REVISION DATE CAS-NO.

Brucine 357-57-3 4/24/1993 SARA 311/312 HAZARDS ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

CAS-NO. **REVISION DATE**

Brucine 357-57-3 4/24/1993

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. **REVISION DATE**

Brucine 357-57-3 4/24/1993

NEW JERSEY RIGHT TO KNOW COMPONENTS

REVISION DATE CAS-NO.

357-57-3 4/24/1993 Brucine

CALIFORNIA PROP. 65

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS **COMPONENTS** 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

H300 FATAL IF SWALLOWED.

H300 + H330FATAL IF SWALLOWED OR IF INHALED

HMIS RATING

HEALTH HAZARD: 3 CHRONIC HEALTH

HAZARD:

FLAMMABILITY: 0 PHYSICAL HAZARD 0

NFPA RATING

HEALTH HAZARD: 4 FIRE HAZARD: 0 REACTIVITY HAZARD: 0

MSDS LEGEND

MOLECULAR WEIGHT MW: MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL ACGIH:

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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