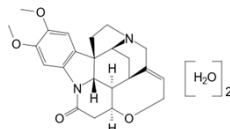


### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Trade name : BRUCINE DIHYDRATE EXTRA PURE  
CAS-No. : 145428-94-0  
Product code : 2370B  
Formula : C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub>•2H<sub>2</sub>O  
Chemical structure :



Synonyms : 10,11-Dimethoxystrychnine; 2,3-Dimethoxystrychnidin-10-one

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial  
For professional use only  
Use of the substance/mixture : Laboratory chemicals  
Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai - INDIA  
T +91 22 6663 6663 - F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com) - [www.lobachemie.com](http://www.lobachemie.com)

#### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 2 H300  
Acute toxicity (inhalation:dust,mist) Category 1 H330  
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412  
Full text of H-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Fatal if inhaled. Fatal if swallowed. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

GHS06

Signal word (CLP) : Danger  
Hazard statements (CLP) : H300+H330 - Fatal if swallowed or if inhaled.  
H412 - Harmful to aquatic life with long lasting effects.  
Precautionary statements (CLP) : P260 - Do not breathe vapours, fume, dust, mist, gas, spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P273 - Avoid release to the environment.  
P284 - In case of inadequate ventilation wear respiratory protection.  
P301+P310 - IF SWALLOWED: Immediately call a doctor.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
BRUCINE DIHYDRATE	CAS-No.: 145428-94-0	100

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a physician immediately.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Rinse mouth. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe dust, fume, mist, gas, spray, vapours. Only qualified personnel equipped with suitable protective equipment may intervene.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, spray, vapours.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1. National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

**Appropriate engineering controls:**

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

**Personal protective equipment symbol(s):**



##### 8.2.2.1. Eye and face protection

**Eye protection:**

Safety glasses

##### 8.2.2.2. Skin protection

No additional information available

##### 8.2.2.3. Respiratory protection

**Respiratory protection:**

Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

##### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder. Crystals.
Molecular mass	: 430.5 g/mol
Colour	: White to light brown (Beige).
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 174 – 179 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: Slightly soluble Ethanol: Soluble Ether: Slightly soluble
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Explosive limits : Not applicable

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Fatal if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Fatal if inhaled.
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### BRUCINE DIHYDRATE EXTRA PURE (145428-94-0)

Viscosity, kinematic	Not applicable
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number

UN-No. (ADR) : UN 1570  
UN-No. (IMDG) : UN 1570  
UN-No. (IATA) : UN 1570  
UN-No. (ADN) : UN 1570  
UN-No. (RID) : UN 1570

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : BRUCINE  
Proper Shipping Name (IMDG) : BRUCINE  
Proper Shipping Name (IATA) : Brucine  
Proper Shipping Name (ADN) : BRUCINE  
Proper Shipping Name (RID) : BRUCINE  
Transport document description (ADR) : UN 1570 BRUCINE, 6.1, I, (C/E)  
Transport document description (IMDG) : UN 1570 BRUCINE, 6.1, I  
Transport document description (IATA) : UN 1570 Brucine, 6.1, I  
Transport document description (ADN) : UN 1570 BRUCINE, 6.1, I  
Transport document description (RID) : UN 1570 BRUCINE, 6.1, I

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 6.1  
Danger labels (ADR) : 6.1



#### IMDG

Transport hazard class(es) (IMDG) : 6.1

# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Danger labels (IMDG) : 6.1



### IATA

Transport hazard class(es) (IATA) : 6.1

Danger labels (IATA) : 6.1



### ADN

Transport hazard class(es) (ADN) : 6.1

Danger labels (ADN) : 6.1



### RID

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



## 14.4. Packing group

Packing group (ADR) : I

Packing group (IMDG) : I

Packing group (IATA) : I

Packing group (ADN) : I

Packing group (RID) : I

## 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

## 14.6. Special precautions for user

### Overland transport

Classification code (ADR) : T2

Special provisions (ADR) : 43

Limited quantities (ADR) : 0

Excepted quantities (ADR) : E5

Packing instructions (ADR) : P002, IBC07

Mixed packing provisions (ADR) : MP18

Portable tank and bulk container instructions (ADR) : T6

Portable tank and bulk container special provisions (ADR) : TP33

(ADR)

Tank code (ADR) : S10AH, L10CH

# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Tank special provisions (ADR) : TU14, TU15, TE19, TE21  
Vehicle for tank carriage : AT  
Transport category (ADR) : 1  
Special provisions for carriage - Packages (ADR) : V10  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV1, CV13, CV28  
Special provisions for carriage - Operation (ADR) : S9, S14  
Hazard identification number (Kemler No.) : 66  
Orange plates :



Tunnel restriction code (ADR) : C/E  
EAC code : 2X

### Transport by sea

Special provisions (IMDG) : 43  
Limited quantities (IMDG) : 0  
Excepted quantities (IMDG) : E5  
Packing instructions (IMDG) : P002  
IBC packing instructions (IMDG) : IBC07  
IBC special provisions (IMDG) : B1  
Tank instructions (IMDG) : T6  
Tank special provisions (IMDG) : TP33  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-A  
Stowage category (IMDG) : A  
Properties and observations (IMDG) : White crystals or powder. Highly toxic if swallowed, by skin contact or by dust inhalation.

### Air transport

PCA Excepted quantities (IATA) : E5  
PCA Limited quantities (IATA) : Forbidden  
PCA limited quantity max net quantity (IATA) : Forbidden  
PCA packing instructions (IATA) : 666  
PCA max net quantity (IATA) : 5kg  
CAO packing instructions (IATA) : 673  
CAO max net quantity (IATA) : 50kg  
Special provisions (IATA) : A6  
ERG code (IATA) : 6L

### Inland waterway transport

Classification code (ADN) : T2  
Special provisions (ADN) : 43, 802  
Limited quantities (ADN) : 0  
Excepted quantities (ADN) : E5  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 2

### Rail transport

Classification code (RID) : T2  
Special provisions (RID) : 43  
Limited quantities (RID) : 0  
Excepted quantities (RID) : E5  
Packing instructions (RID) : P002, IBC07  
Mixed packing provisions (RID) : MP18  
Portable tank and bulk container instructions (RID) : T6  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : S10AH, L10CH  
Special provisions for RID tanks (RID) : TU14, TU15, TU38, TE21, TE22  
Transport category (RID) : 1  
Special provisions for carriage – Packages (RID) : W10



# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31  
Hazard identification number (RID) : 66

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

BRUCINE DIHYDRATE EXTRA PURE is not on the REACH Candidate List

BRUCINE DIHYDRATE EXTRA PURE is not on the REACH Annex XIV List

BRUCINE DIHYDRATE EXTRA PURE is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

BRUCINE DIHYDRATE EXTRA PURE is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

##### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

##### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

##### Switzerland

Storage class (LK) : LK 6.1 - Toxic materials

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)

# BRUCINE DIHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Abbreviations and acronyms	
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements	
Acute Tox. 1 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 1
Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
H300	Fatal if swallowed.
H330	Fatal if inhaled.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.