



# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

### 1.1 Product identifiers

Product name : Cuprous Potassium Cyanide

CAS-No. : 13682-73-0

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

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

Company : Bio-Chem Chemicals  
5455, Nicholson Nicholson Road,  
Science Market,  
Ambala Cantt. 133001 Haryana (India)  
+91-82952 41953  
info@biofinechemical.com - www.biofinechemical.com

### 1.4 Emergency telephone number

Emergency Phone # : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Acute toxicity (oral), H300

Category 1

Germ cell mutagenicity, H340

Category 1A

Full text of classification categories and H statements : see section 16

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Carc. Cat. 1; R45

T+; R26/27/28

R32

Full text of R-phrases: see section 16

## Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to display Extra classification(s) to display

Hazard pictograms (CLP) :



GHS06

GHS08

Signal word (CLP) : Danger

Hazard statements (CLP) : H300 - Fatal if swallowed  
H340 - May cause genetic defects

Precautionary statements (CLP) : P201 - Obtain special instructions before use  
P264 - Wash ... thoroughly after handling  
P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician  
P308+P313 - IF exposed or concerned: Get medical advice/attention

EUH phrases : EUH032 - Contact with acids liberates very toxic gas

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Name : Cuprous Potassium Cyanide Extra Pure CAS No  
: 13682-73-0

Full text of R- and H-phrases: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Get immediate medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries after skin contact : Fatal in contact with skin.  
Symptoms/injuries after ingestion : Fatal if swallowed.

#### **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 : Carbon dioxide. Dry powder. Foam. Water spray.  
Unsuitable extinguishing media : Do not use a heavy water stream.

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

No additional information available

#### **5.3. Advice for firefighters**

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### **SECTION 6: Accidental release measures**

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

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

Emergency procedures : Evacuate unnecessary personnel.

##### **6.1.2. For emergency responders**

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Ventilate area.

#### **6.2. Environmental precautions**

Avoid release to the environment.

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

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

#### **6.4. Reference to other sections**

No additional information available

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Avoid contact with skin and eyes. Do not breathe vapours.  
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

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

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

No additional information available

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

No additional information available

## 8.2. Exposure controls

|                          |                                      |
|--------------------------|--------------------------------------|
| Hand protection          | : Protective gloves                  |
| Eye protection           | : Chemical goggles or safety glasses |
| Skin and body protection | : Wear suitable protective clothing  |
| Respiratory protection   | : Wear respiratory protection        |

## SECTION 9: Physical and chemical properties

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

|                                            |                       |
|--------------------------------------------|-----------------------|
| Physical state                             | : Solid               |
| Colour                                     | : White powder.       |
| Odour                                      | : No data available   |
| Odour threshold                            | : No data available   |
| pH                                         | : No data available   |
| Relative evaporation rate (butylacetate=1) | : No data available   |
| Melting point                              | : 290 °C              |
| Freezing point                             | : No data available   |
| Boiling point                              | : No data available   |
| Flash point                                | : No data available   |
| Auto-ignition temperature                  | : No data available   |
| Decomposition temperature                  | : No data available   |
| Flammability (solid, gas)                  | : No data available   |
| Vapour pressure                            | : No data available   |
| Relative vapour density at 20 °C           | : No data available   |
| Relative density                           | : No data available   |
| Density                                    | : 4 g/cm <sup>3</sup> |
| Solubility                                 | : No data available   |
| Log Pow                                    | : No data available   |
| Viscosity, kinematic                       | : No data available   |
| Viscosity, dynamic                         | : No data available   |
| Explosive properties                       | : No data available   |
| Oxidising properties                       | : No data available   |
| Explosive limits                           | : No data available   |

## **9.2. Other information**

No additional information available

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

No additional information available

### **10.2. Chemical stability**

Stable under normal conditions.

### **10.3. Possibility of hazardous reactions**

Highly reactive material. Contact with acids liberates very toxic gas.

### **10.4. Conditions to avoid**

Moisture. Direct sunlight.

### **10.5. Incompatible materials**

No additional information available

### **10.6. Hazardous decomposition products**

No additional information available

## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

|                                                     |                                                   |
|-----------------------------------------------------|---------------------------------------------------|
| Acute toxicity                                      | : Oral: Fatal if swallowed.                       |
| Skin corrosion/irritation                           | : Not classified                                  |
| Serious eye damage/irritation                       | : Not classified                                  |
| Respiratory or skin sensitisation                   | : Not classified                                  |
| Germ cell mutagenicity                              | : May cause genetic defects.                      |
| Carcinogenicity                                     | : Not classified                                  |
| Reproductive toxicity                               | : Not classified                                  |
| Specific target organ toxicity (single exposure)    | : Not classified                                  |
| Specific target organ toxicity (repeated exposure)  | : Not classified                                  |
| Aspiration hazard                                   | : Not classified                                  |
| Potential adverse human health effects and symptoms | : Fatal if swallowed. Fatal in contact with skin. |

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

No additional information available

## 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

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Ecology - waste materials : Hazardous waste due to toxicity.

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No. (ADR) : 1679

UN-No. (IMDG) : 1679

UN-No.(IATA) : 1679

UN-No.(ADN) : 1679

UN-No. (RID) : 1679

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : POTASSIUM CUPROCYANIDE

Proper Shipping Name (IMDG) : POTASSIUM CUPROCYANIDE

Proper Shipping Name (IATA) : POTASSIUM CUPROCYANIDE

Proper Shipping Name (ADN) : POTASSIUM CUPROCYANIDE

Proper Shipping Name (RID) : POTASSIUM CUPROCYANIDE

Transport document description (ADR) : UN 1679 POTASSIUM CUPROCYANIDE, 6.1, II, (D/E)

Transport document description (IMDG) : UN 1679 POTASSIUM CUPROCYANIDE, 6.1, II, MARINE POLLUTANT

Transport document description (IATA) : UN 1679 POTASSIUM CUPROCYANIDE, 6.1, II

Transport document description (ADN) : UN 1679 POTASSIUM CUPROCYANIDE, 6.1, II

Transport document description (RID) : UN 1679 POTASSIUM CUPROCYANIDE, 6.1, II

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 6.1

Danger labels (ADR) : 6.1



GHS06

## IMDG

Transport hazard class(es) (IMDG) : 6.1

Danger labels (IMDG) : 6.1

:



## IATA

Transport hazard class(es) (IATA) : 6.1

Hazard 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) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : Yes (IMDG only)

Other information : No supplementary information available

## 14.6. Special precautions for user

### - Overland transport

|                                                                         |               |
|-------------------------------------------------------------------------|---------------|
| Classification code (ADR)                                               | : T5          |
| Limited quantities (ADR)                                                | : 500g        |
| Excepted quantities (ADR)                                               | : E4          |
| Packing instructions (ADR)                                              | : P002, IBC08 |
| Special packing provisions (ADR)                                        | : B4          |
| Mixed packing provisions (ADR)                                          | : MP10        |
| Portable tank and bulk container instructions (ADR)                     | : T3          |
| Portable tank and bulk container special provisions (ADR)               | : TP33        |
| Tank code (ADR)                                                         | : SGAH        |
| Tank special provisions (ADR)                                           | : TU15, TE19  |
| Vehicle for tank carriage                                               | : AT          |
| Transport category (ADR)                                                | : 2           |
| Special provisions for carriage - Packages (ADR)                        | : V11         |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV13, CV28  |
| Special provisions for carriage - Operation (ADR)                       | : S9, S19     |
| Hazard identification number (Kemler No.)                               | : 60          |
| Orange plates                                                           | :             |



|                               |       |
|-------------------------------|-------|
| Tunnel restriction code (ADR) | : D/E |
| EAC code                      | : 2X  |

### - Transport by sea

|                                 |          |
|---------------------------------|----------|
| Limited quantities (IMDG)       | : 500 g  |
| Excepted quantities (IMDG)      | : E4     |
| Packing instructions (IMDG)     | : P002   |
| IBC packing instructions (IMDG) | : IBC08  |
| IBC special provisions (IMDG)   | : B2, B4 |
| Tank instructions (IMDG)        | : T3     |
| Tank special provisions (IMDG)  | : TP33   |
| EmS-No. (Fire)                  | : F-A    |
| EmS-No. (Spillage)              | : S-A    |
| Stowage category (IMDG)         | : A      |
| Segregation (IMDG)              | : SG35   |
| MFAG-No                         | : 157    |

### - Air transport

|                                              |         |
|----------------------------------------------|---------|
| PCA Excepted quantities (IATA)               | : E4    |
| PCA Limited quantities (IATA)                | : Y644  |
| PCA limited quantity max net quantity (IATA) | : 1kg   |
| PCA packing instructions (IATA)              | : 669   |
| PCA max net quantity (IATA)                  | : 25kg  |
| CAO packing instructions (IATA)              | : 676   |
| CAO max net quantity (IATA)                  | : 100kg |
| ERG code (IATA)                              | : 6L    |



|                                                               |                    |
|---------------------------------------------------------------|--------------------|
| <b>- Inland waterway transport</b>                            | : T5               |
| Classification code (ADN)                                     | : 802              |
| Special provisions (ADN)                                      | : 500 g            |
| Limited quantities (ADN)                                      | : E4               |
| Excepted quantities (ADN)                                     | : PP, EP           |
| Equipment required (ADN)                                      | : 2                |
| Number of blue cones/lights (ADN)                             |                    |
| <b>- Rail transport</b>                                       | : T5               |
| Classification code (RID)                                     | : 500g             |
| Limited quantities (RID)                                      | : E4               |
| Excepted quantities (RID)                                     | : P002, IBC08      |
| Packing instructions (RID)                                    | : B4               |
| Special packing provisions (RID)                              | : MP10             |
| Mixed packing provisions (RID)                                | : T3               |
| Portable tank and bulk container instructions (RID)           | : TP33             |
| Portable tank and bulk container special provisions (RID)     | : SGAH             |
| Tank codes for RID tanks (RID)                                | : TU15             |
| Special provisions for RID tanks (RID)                        | : 2                |
| Transport category (RID)                                      | : W11              |
| Special provisions for carriage – Packages (RID)              | : CW13, CW28, CW31 |
| Special provisions for carriage – Loading and unloading (RID) | : CE9              |
| Colis express (express parcels) (RID)                         | : 60               |
| Hazard identification number (RID)                            |                    |

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

Cuprous Potassium Cyanide is not on the REACH Candidate List

Cuprous Potassium Cyanide is not on the REACH Annex XIV List

### **15.1.2. National regulations**

#### **Germany**

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Denmark**

Recommendations Danish Regulation

: Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

Full text of R-, H- and EUH-phrases:

|                     |                                                                 |
|---------------------|-----------------------------------------------------------------|
| Acute Tox. 1 (Oral) | Acute toxicity (oral), Category 1                               |
| Muta. 1A            | Germ cell mutagenicity, Category 1A                             |
| H300                | Fatal if swallowed                                              |
| H340                | May cause genetic defects                                       |
| EUH032              | Contact with acids liberates very toxic gas                     |
| R26/27/28           | Very toxic by inhalation, in contact with skin and if swallowed |
| R32                 | Contact with acids liberates very toxic gas                     |
| R45                 | May cause cancer                                                |
| T+                  | Very toxic                                                      |