



## MATERIAL SAFETY DATA SHEET SDS/MSDS

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

#### 1.1 Product identifiers

Product name : Collodion 4%

#### 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 Road, Science Market  
Ambala Cantt, 133001 - Haryana  
+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

Flammable liquids (Category 1), H224

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

##### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H224

H336

Extremely flammable liquid and vapour.  
May cause drowsiness or dizziness.

Precautionary statement(s)

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

|                                      |                                                                                      |
|--------------------------------------|--------------------------------------------------------------------------------------|
| P370 + P378                          | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P403 + P235                          | Store in a well-ventilated place. Keep cool.                                         |
| Supplemental Hazard information (EU) |                                                                                      |
| EUH019                               | May form explosive peroxides.                                                        |
| EUH066                               | Repeated exposure may cause skin dryness or cracking.                                |

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Synonyms : Cellulose nitrate

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component            |              | Classification                                         | Concentration  |
|----------------------|--------------|--------------------------------------------------------|----------------|
| <b>Diethyl ether</b> |              |                                                        |                |
| CAS-No.              | 60-29-7      | Flam. Liq. 1; Acute Tox. 4;                            | >= 50 - < 70 % |
| EC-No.               | 200-467-2    | STOT SE 3; H224, H302,                                 |                |
| Index-No.            | 603-022-00-4 | H336                                                   |                |
| <b>Ethanol</b>       |              |                                                        |                |
| CAS-No.              | 64-17-5      | Flam. Liq. 2; Eye Irrit. 2; H225,                      | >= 30 - < 50 % |
| EC-No.               | 200-578-6    | H319                                                   |                |
| Index-No.            | 603-002-00-5 | Concentration limits:<br>>= 50 %: Eye Irrit. 2A, H319; |                |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 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. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 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

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

No data available

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **5.4 Further information**

Use water spray to cool unopened containers.

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

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

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

For disposal see section 13.

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

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

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

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

Store in cool place. 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. Do not store together with oxidizing and self-igniting products.

Heat- and air-sensitive.

Storage class (TRGS 510): Flammable liquids

### **7.3 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**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 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.

### Body Protection

impervious clothing, Flame retardant antistatic protective clothing., 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 respirator with multi-purpose combination (US) or type AXBEK (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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                                 |                                                                   |
|-------------------------------------------------|-------------------------------------------------------------------|
| a) Appearance                                   | Form: liquid                                                      |
| b) Odour                                        | No data available                                                 |
| c) Odour Threshold                              | No data available                                                 |
| d) pH                                           | No data available                                                 |
| e) Melting point/freezing point                 | No data available                                                 |
| f) Initial boiling point and boiling range      | 34 °C                                                             |
| g) Flash point                                  | -52 °C - closed cup                                               |
| h) Evaporation rate                             | No data available                                                 |
| i) Flammability (solid, gas)                    | No data available                                                 |
| j) Upper/lower flammability or explosive limits | Upper explosion limit: 36 %(V)<br>Lower explosion limit: 1,7 %(V) |
| k) Vapour pressure                              | 576 hPa at 20 °C                                                  |
| l) Vapour density                               | No data available                                                 |
| m) Relative density                             | No data available                                                 |
| n) Water solubility                             | insoluble                                                         |
| o) Partition coefficient: n-octanol/water       | No data available                                                 |
| p) Auto-ignition temperature                    | ca.170 °C                                                         |
| q) Decomposition temperature                    | No data available                                                 |
| r) Viscosity                                    | No data available                                                 |

s) Explosive properties      No data available

t) Oxidizing properties      No data available

## **9.2 Other safety information**

No data available

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

### **10.1 Reactivity**

No data available

### **10.2 Chemical stability**

Stable under recommended storage conditions.

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

No data available

### **10.4 Conditions to avoid**

Heat, flames and sparks. Test for peroxide formation periodically and before distillation.

Extremes of temperature and direct sunlight.

Heat, flames and sparks.

### **10.5 Incompatible materials**

Oxidizing agents, Alkali metals

### **10.6 Hazardous decomposition products**

Other decomposition products - No data available

In the event of fire: see section 5

## **SECTION 11: Toxicological information**

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

#### **Acute toxicity**

No data available

#### **Skin corrosion/irritation**

No data available

#### **Serious eye damage/eye irritation**

No data available

#### **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.

#### **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: Not available

Contact with eyes can cause:., Redness, Blurred vision, Prolonged or repeated exposure to skin causes defatting and dermatitis., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Ingestion may provoke the following symptoms:., Irregularities - Based on Human Evidence (Diethyl ether)

## SECTION 12: Ecological information

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: 1993

IMDG: 1993

IATA: 1993

### 14.2 UN proper shipping name

ADR/RID : FLAMMABLE LIQUID, N.O.S. (Diethyl ether)

IMDG : FLAMMABLE LIQUID, N.O.S. (Diethyl ether)

IATA : Flammable liquid, n.o.s. (Diethyl ether)

### 14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

### 14.4 Packaging group

ADR/RID: I

IMDG:

IATA: I

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No.453/2010.

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

### **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

## **SECTION 16: Other information**

### **Full text of H-Statements referred to under sections 2 and 3.**

|        |                                                       |
|--------|-------------------------------------------------------|
| EUH019 | May form explosive peroxides.                         |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| H224   | Extremely flammable liquid and vapour.                |
| H225   | Highly flammable liquid and vapour.                   |
| H302   | Harmful if swallowed.                                 |
| H319   | Causes serious eye irritation.                        |
| H336   | May cause drowsiness or dizziness.                    |