

# **MATERIAL SAFETY DATA SHEET (SDS/MSDS)**

**BARFOED'S REAGENT**

**CAS-No.: NA**

**Product Code: 00329**

**Chemnovo**  
DRIVEN BY CHEMISTRY, DEFINED BY PRECISION

**CHEMNOVO SYNTHESIS PVT LTD.**

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## BARFOED'S REAGENT

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

#### **1.1. Product identifier**

Product form : Mixture  
Trade name : Barfoed's Reagent

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

##### **1.2.1. Relevant identified uses**

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**

Company : Chemnovo Synthesis Pvt Ltd.  
N-226 Near Kumbhavali Naka  
Tarapur MIDC, Boisar-401 506  
Palghar, Maharashtra  
Telephone : +91 7400096089  
Email: export@chemnovo.in

#### **1.4. Emergency telephone number**

Emergency number : + 91 7400096089 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Serious eye damage/eye irritation, Category 2  
H319  
Skin corrosion/irritation, Category 2  
H315

Category 2

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

May cause fire or explosion; strong oxidiser. Causes severe skin burns and eye damage. Causes serious eye irritation.

#### **2.2. Label elements**

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

Hazard symbols :



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP)	:	H315 - Causes skin irritation H319 - Causes serious eye irritation
Precautionary statements (CLP)	:	P280 - Wear protective gloves, protective clothing, eye protection, face protection P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

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

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
WATER	CAS-No.: 7732-18-5 EC-No.: 231-791-2	75 - 99	Not classified
Copper(II) acetate	(CAS No) 142-71-2	5 - 10	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319, Skin Irrit. 2, H315 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Acetic acid	(CAS No) 64-19-7 (EC no) 200-580-7	1 - 5	Skin Corr. 1A, H314 Eye Dam. 1, H318 Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332

Full text of H-statements: see section 16

## 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	:	Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get 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. Do not induce vomiting.

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

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

**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 firefighter**

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 : On land, sweep or shovel into suitable containers. Collect spillage

**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 : Avoid contact with skin and eyes. Do not breathe vapours.

Hygiene measures : 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	:	Liquid
Colour	:	Blue coloured solution.
Odour	:	No data available
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
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
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**

No additional information available

**10.4. Conditions to avoid**

Direct sunlight. Overheating. Open flame

**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	:	Not classified
Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
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

**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**

No additional information available

**SECTION 14: Transport information**

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

**14.1. UN number**

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No.(IATA)	:	Not applicable
UN-No.(AND)	:	Not applicable
UN-No. (RID)	:	Not applicable

**14.2. UN proper shipping name**

Proper Shipping Name (ADR)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

**14.3. Transport hazard class(es)**

ADR	
Transport hazard class(es) (ADR)	:
IMDG	
Transport hazard class(es) (IMDG)	:
IATA	
Transport hazard class(es) (IATA)	:
AND	
Transport hazard class(es) (ADN)	:
RID	
Transport hazard class(es) (RID)	:

**14.4. Packing group**

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

**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

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

**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**

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

**15.1.2. National regulations****Germany**

AwSV/VwVwS Annex reference : :

Water hazard class (WGK) 3, strongly hazardous to water

(Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal  
Immission Control Act - 12.BImSchV

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

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

**MATERIAL SAFETY DATA SHEET (SDS/MSDS)****BARFOED'S REAGENT****CAS-No.: NA****Full text of H- and EUH-statements:**

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic	Acute 1 Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.chemnovo.in](http://www.chemnovo.in) for additional terms and conditions of sale.

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