ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210.

Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990 Email: sales@oxfordlabchem.com / info@oxfordlabchem.com Web: www.oxfordlabchem.com Range of
Laboratory Chemicals

MATERIAL SAFETY DATA SHEET

BARFOED'S REAGENT

MSDS CAS: -

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product

Product Name: BARFOED'S REAGENT

CAS#: Not available.
C.I. No.: Not available.
Synonym: Not available.

Chemical Name: Not available. Chemical Formula: Not available.

Brand: OXFORD

Details Of The Supplier Of The Safety Data Sheet:

Company identification: OXFORD LAB FINE CHEM LLP

Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,

Navghar, Vasai (East). Palghar - 401 210.

Mumbai, Maharashtra, INDIA.

Tel: 91-250-2390989

Tel/Fax: 91-250-2390032

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	% by Weight
Water	7732-18-5	75 - 99
Copper(II) acetate	142-71-2	5 - 10
Acetic acid	64-19-7	1 - 5

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Section 3: Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1999/45 Not classified.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

Skin irritation - Category 2 - Warning (CLP: Skin Corr. 2) H315

Environmental hazards : Hazardous to the aquatic environment - Chronic hazard - Category 2

(CLP: Aquatic Chronic 2) H411

Other hazards: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

Section 4: First Aid Measures

Description of first aid measures

Inhalation

Assure fresh air breathing. Allow the victim to rest.

Skin contact

Wash contaminated clothing before reuse. Wash with plenty of soap and water. Specific treatment (see on this label). Get medical advice. If skin irritation occurs:

Eve contact

Get medical advice. If eye irritation persists: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

Ingestion:

Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Causes serious eye irritation.

Causes skin irritation.

Indication of any immediate medical attention and special treatment needed

General information: Never give anything by mouth to an unconscious person. If you feel unwell, seek

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medical advice (show the label where possible).

Section 5: Fire and Explosion Data

Extinguishing media

Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment,

Including respiratory protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject)

fire-fighting water to enter environment.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if

product enters sewers or public waters.

Methods and materials for containment and cleaning up

Clean up methods: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Store away from other materials. Collect spillage.

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Section 7: Handling and Storage

Precautions for safe handling

Handling : Wash thoroughly after handling. Wash thoroughly after

handling.

Wash thoroughly after handling.

Technical protective measures : Provide good ventilation in process area to prevent formation of

vapour.

Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated

place. Keep container closed when not in use.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

Specific end uses

Specific end use(s) : None.

Section 8: Exposure Controls/Personal Protection

Personal protection : Avoid all unnecessary exposure.

Respiratory protection
 Hand protection
 Wear approved mask.
 Wear protective gloves.

• Skin protection : Wear suitable protective clothing.

• Eye protection : Chemical goggles or safety glasses.

• Others : When using, do not eat, drink or smoke.

Control parameters

Occupational Exposure Limits : No data available.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state at 20 °C : Liquid.

Color : Blue-green
Odor : Characteristic.

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Section 9: Physical and Chemical Properties (Continued)

Odor threshold : No data available.

pH value : No data available.

Melting point $[^{\circ}C]$: No data available.

Decomposition point [°C] : No data available.

Critical temperature [°C] : No data available.

Auto-ignition temperature [°C] : No data available.

Flammability (solid, gas) : No data available.

Flash point [°C] : No data available.

Boiling point [°C] : No data available.

Initial boiling point [°C] : No data available. Final boiling point [°C] : No data available.

Evaporation rate : No data available.

Vapour pressure $[20^{\circ}C]$: 14 mm Hg

Vapour density : No data available.

Density [g/cm3] : 1.1

Relative density, liquid (water=1) : No data available.

Solubility in water : No data available.

Log Pow octanol / water at 20°C : No data available. Viscosity at 40°C [mm2/s] : No data available.

Molecular Weight : No data available.

Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidizing properties : No data available.

Section 10: Stability and Reactivity Data

Reactivity

Reactivity: Not established.

Chemical stability

Chemical stability: Stable under recommended storage conditions.

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Laboratory Chemicals

Section 10: Stability and Reactivity Data (Continued)

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Possibility of hazardous reactions

Hazardous reactions: Not established.

Conditions to avoid

Conditions to avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Overheating.

Heat. Sparks.

Incompatible materials

Materials to avoid: Strong acids. Strong bases.

Hazardous decomposition products

Hazardous decomposition products: Fumes. Carbon monoxide. Carbon dioxide.

Section 11: Toxicological Information

<u>Information on toxicological effects</u>

Toxicity information : The product has been not fully tested. The calculated risk has been done

under the requirements of the EU regulations.

Acute toxicity : CAS# 142-71-2 Oral, mouse: LD50 = 196 mg/kg; Oral, rat: LD50 = 501

> mg/kg; CAS# 64-19-7: Draize test, rabbit, skin: 50 mg/24H Mild; Inhalation, mouse: LC50 = 5620 ppm/ 1H; Oral, rat: LD50 = 3310

mg/kg;Skin, rabbit: LD50 = 1060 uL/kg; CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

 Inhalation : Based on available data, the classification criteria are not met.

 Dermal : Based on available data, the classification criteria are not met.

 Ingestion : Based on available data, the classification criteria are not met.

Corrosion : Based on available data, the classification criteria are not met.

Irritation : Causes serious eve irritation.

Causes skin irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure

: Based on available data, the classification criteria are not met. **Aspiration hazard** : Based on available data, the classification criteria are not met.

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Section 12: Ecological Information

Toxicity

Toxicity information: The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations. Toxic to aquatic life with long lasting effects.

Persistence – degradability

Persistence - degradability: May cause long-term adverse effects in the environment.

Bio accumulative potential

Bio accumulative potential: Not established.

Mobility in soil

Mobility in soil: Not established.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

Other adverse effects

Environmental precautions: Avoid release to the environment.

Section 13: Disposal Considerations

Waste treatment methods

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Section 14: Transport Information

Land transport (ADR-RID)

General information : Not regulated.

Sea transport (IMDG)

General information : Not regulated

Air transport (ICAO-IATA)

General information : Not regulated

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Section 15: Other Regulatory Information

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

Safety, health and environmental: Ensure all national/local regulations are observed.

Regulations/legislation specific for

The substance or mixture

REACH Restrictions - Annex XVII: The components of this product are not subject to restrictions.

REACH Authorization - Annex XIV: The components of this product are not subject to authorization.

Chemical Safety Assessment

Chemical Safety Assessment: It has not been carried out.

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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