



Trade Name: MiniOne® Benedict's Solution

MSDS

Revision Date: November 3rd, 2022

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Code: Benedict's Solution
Trade Name: MiniOne® Benedict's Solution
Synonym: Test for the detection of reducing sugars

Company Identification: Embi Tec or The MiniOne Systems
7738 Arjons Drive
San Diego, CA 92126
USA
858-684-3190

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

This experimental lab kit includes the various chemicals listed below & various plastic accessories.

Chemical Name: Copper (II) Sulphate, pentahydrate
Synonyms: Copper sulfate pentahydrate, Blue vitriol, Cupric sulfate pentahydrate
Molecular weight: 249.68 g/mol
CAS-No.: 7758-99-8
EC-No.: 231-847-6

Chemical Name: Sodium carbonate, anhydrous
Synonyms: Calcined soda, Carbonic acid disodium salt, Soda ash
Molecular weight: 105.99 g/mol
CAS-No.: 497-19-8
EC-No.: 207-838-8

Chemical Name: Sodium citrate, trisodium salt, dihydrate
Synonyms: Citric acid trisodium salt dihydrate, Trisodium citrate dihydrate
Molecular weight: 294.10 g/mol
CAS-No.: 6132-04-3
EC-No.: 200-675-3

Chemical Name: Nanopure water
Synonyms: Deionized water
Molecular weight: 18.02 g/mol
CAS-No.: 7732-18-5
EC-No.: N/A

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance/mixture: Not a hazardous substance
GHS Label Elements: Not a hazardous substance
Hazards not classified or not covered by GHS: None

SECTION 4: FIRST AID MEASURES

Description of first aid measures:

General advice: Move out of dangerous area
Skin contact: Wash off immediately with plenty of water



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Eye contact: Rinse immediately with plenty of water as a precaution, also under the eyelids
Ingestion: Get medical attention immediately; never give anything by mouth to an unconscious person; rinse mouth with water
Inhalation: Move to fresh air
Notes To physician: Treat symptomatically

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, water spray, alcohol-resistant foam or carbon dioxide
Special hazards arising from substance/mixture: Carbon oxides, sodium oxides
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus and protective suit
Further Information: No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment
Emergency Procedures: Avoid dust formation. Avoid breathing vapor, mist or gas
Methods for Cleaning Up: Soak up with inert absorbent material, if needed

SECTION 7: HANDLING AND STORAGE

Handling: No special handling advice required
Storage: Keep in properly labeled containers. Stored at 10 to 25 °C (recommended).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: Contains no substance with occupational exposure limit values.
Exposure Limit Values: None established
Exposure Controls: Use process enclosures, local exhaust ventilation, or other engineering controls as needed
Respiratory Protection: Not required. If prefer, use an approved air-purifying respirator.
Eye/Face Protection: Use safety glasses or chemical goggles
Skin/Hand Protection: Use chemical gloves as needed. Wear lightweight protective clothing
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice
Environmental Exposure Controls: Prevent product from entering drains

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue liquid
Odor: Data not available
Flash Point: Data not available
Viscosity: Data not available
Solubility: Aqueous solution
Density: Data not available
Boiling Point: Data not available
Melting Point: Data not available
pH: Data not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Data not available
Stability: Stable under recommended storage conditions
Materials to Avoid: Strong oxidizing agents



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Products: No information available

Polymerization: Hazardous polymerization does not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available

Serious eye irritation: Data not available

Respiratory/skin irritation: Data not available

Additional information:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. However, when the product is handled appropriately, hazardous effects are unlikely to occur. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: ECOLOGICAL INFORMATION

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations; offer surplus to a licensed disposal company if necessary.

SECTION 14: TRANSPORT INFORMATION

DOT (US): Not dangerous goods

IMDG: Not dangerous goods

IATA Proper Shipping Name: Not classified as dangerous in the meaning of transport regulations

IATA Hazard Class: Not classified as hazardous for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations:

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

US State Regulations:

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts. Cupric sulfate pentahydrate can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Massachusetts.

EU Regulations:

This preparation does not meet the dangerous preparations classification criteria under 1999/45/EC.

Components are listed on EINECS or exempted from listing.

Canadian Regulations:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and contains the information required by the CPR.

This product is classified as "non-controlled" under the WHMIS Hazard Class.

SECTION 16: OTHER INFORMATION

This product is sold for educational, research and/or development purposes only. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with



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caution. Since Embi Tec and The MiniOne Systems cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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End of Material Safety Data Sheet