

SAFETY DATA SHEET

SECTION 1 --- IDENTIFICATION

Product Name: Copper Calibration and Validation Standard
Common Synonyms: NA
Part numbers: LQC-CU-1, LQC-CU-2, LQC-CU-3, LQC-CU-4, LQC-CU-5, LQC-CU-V
Product Use: Analytical standard, Laboratory Reagent
Restrictions: Not for human consumption. Intended for laboratory use only.

Manufacturer/Supplier:
Bion Analytical
P.O. Box 85252
Sioux Falls, SD 57118
TEL: (605) 838-6679

In Case of EMERGENCY Call INFOTRAC: (800) 535-5053

SECTION 2 --- HAZARD IDENTIFICATION

Signal Word: Danger

Hazard Statements: Highly flammable liquid and vapor.



Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces- No smoking.
Keep container tightly closed.
Wear protective gloves/clothing/eye and face protection.
Store in a dry, well-ventilated area, keep cool.
Wash thoroughly after use.
Dispose contents according to state and federal regulations.

SECTION 3 --- COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No./EC No.</u>	<u>Concentration %</u>
Ethanol	64-17-5/200-578-6	>99.9% (w/v)
Copper	7440-50-8	Trace

SECTION 4 --- FIRST AID MEASURES

Emergency and First Aid Procedures

INGESTION: Rinse mouth with water. Do not induce vomiting. Seek immediate medical advice.
INHALATION: Supply fresh air. If required provide artificial respiration. Seek immediate medical advice.
SKIN CONTACT: Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.
EYE CONTACT: Rinse opened eye for at least 15 minutes under running water. Seek immediate medical advice.

SECTION 5 --- FIRE-FIGHTING MEASURES

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.
Toxic Gases Produced: Carbon monoxide and carbon dioxide.
Protective equipment: Wear self-contained breathing apparatus. Wear fully protective impervious suit.

SECTION 6 --- ACCIDENTAL RELEASE MEASURES

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Steps to be Taken in the Event of a Spill or Discharge

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of according to local and federal regulations. Ensure adequate ventilation.

Flush with water or aqueous cleansing agents. Keep away from ignition sources.

SECTION 7 --- HANDLING AND STORAGE

Storage Requirements

Avoid eye and skin contact. Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. No smoking permitted in work area. Store in a dry, well-ventilated area, keep cool. Wash thoroughly after use.

SECTION 8 --- EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL (ethanol): TWA 1000 ppm
NIOSH REL (ethanol): TWA 1000 ppm

Eye/Face Protection: Safety glasses
Protective Clothing: Coat & Apron
Protective Gloves: Chemical resistant gloves
Ventilation Requirements: Well ventilated area or vent hood
Breathing equipment: Use suitable respirator when high concentrations are present.

SECTION 9 --- PHYSICAL and CHEMICAL PROPERTIES

Physical State: Liquid
Appearance & Odor: Clear, colorless liquid, with alcohol-like odor
Boiling Point: Not determined
Melting Point: Not determined
Specific Gravity: 0.789 g/mL (Water = 1)
Vapor Pressure (mmHg): 2.1
Vapor Density (air=1): N/A
Evaporation Rate: N/A
Flash Point (Closed Cup): ~14 °C
Auto ignition Temperature: not determined
Flammable Limits: Upper - not determined
Lower - not determined

SECTION 10 --- STABILITY AND REACTIVITY

Stability: Stable
Conditions to Avoid: Heat, flames and sparks
Incompatibles: Oxidizing agents, acids
Decomposition Products: Carbon monoxide and Carbon dioxide

SECTION 11 --- TOXICOLOGICAL INFORMATION

Emergency Overview

Emergency Overview: Causes irritation to skin and eyes. May affect liver, stomach and kidneys. Sulfuric acid is present in an extremely dilute concentration. Target Organs: Eyes, skin, central nervous system, liver, kidney, stomach. May cause irritation. May cause headaches, gastritis, intoxication. Can cause eye irritation. May cause temporary pain and blurred vision. May cause skin irritation, or prolonged skin contact causes drying and cracking of the skin.

Toxicity of components

LD₅₀ Oral, Rat: (Ethanol) 7,060 mg/kg; LD₅₀, Inhalation, Rat: (Ethanol) 20,000 ppm in 10 hours.

Ethanol: RTECS# KQ6300000

Central nervous system depression including headaches, narcosis and heart damage are possible.

Not all chemical, physical and toxicological properties have been thoroughly investigated.

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SECTION 12 --- ECOLOGICAL INFORMATION

No ecological information available for this product.

SECTION 13 --- DISPOSAL CONSIDERATIONS

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

SECTION 14 --- TRANSPORT INFORMATION

If shipping over exempt quantities.

Domestic (D.O.T.)

Proper Shipping Name: Ethanol solutions

UN #: UN1170

Packing Group: II

SECTION 15 --- REGULATORY INFORMATION

California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth or any other reproductive defects. It applies to beverage use only. This product is NOT intended for this use.

SECTION 16 --- OTHER INFORMATION

Revision Date: 5/15/2015

N/A =Not Applicable or Not Available

N/E = Not Established

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated there under (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes.

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