2732 Kuser Road Hamilton, NJ 08691

Safety Data Sheet

Effective Date: June 1, 2015

Section 1. Identification

Product name: CQC Reagent Tablet

Product code: 4059-00

General Use: Alkaline phosphatase test reagent

Product description: Tablet

Responsible Party: Weber Scientific Inc.

2732 Kuser Rd Hamilton NJ 08691

609-584-7677

Emergency: Chem-Tel 800-255-3924

Outside USA: 813-248-0585

Section 2. Hazards Identification

In the tablet form this product has minimal potential health effects.

Internal toxicity is low.

Chronic exposure may be toxic to kidneys, cardiovascular system, CNS (Central Nervous System) and produce target organ damage.

INHALATION: Excessive levels of airborne dust may irritate the mucous membranes and the upper respiratory tract.

SKIN: Continuous contact with the powdered product may cause red, dry, cracked skin.

EYES: Direct contact with the powdered product causes irritation of the eyes.

Section 3. Composition/Information on Ingredients

Component	<u>CAS #</u> %	by weight	OSHA PEL	MSHA TWA	SARA Title III
Boric Acid (a) (H ₃ BO ₃)	10043-35-3	65-85	n/a	n/a	
CQC-2,6 dichloroquinone -4-chloroimide) (a) (C ₆ H ₂ Cl ₃ N O)	101-38-2	5-10	n/a	n/a	
Cupric Sulfate (a,b)	7758-98-7	4-8	0.1 mg/m^3	1 mg/m ³	yes

⁽a,) See Section 15

⁽b) Refer to Section 13 "Disposal Considerations" for Resource Conversation and Recovery Act (RCRA) status in 40 CFR 260-281.

Section 4- First Aid Measures

INHALATION: Remove affected person to fresh air, If breathing is difficult or discomfort occurs obtain medical attention.

SKIN: Wash affected area with soap and water, launder contaminated clothing before reuse, if irritation persists seek medical attention.

EYES: Remove contact lenses, flush eyes with clear running water for 15 minutes while holding eyelids open, if irritation persists seek medical attention.

INGESTION: Drink plenty of water. Never give anything by mouth to an unconscious person. If any discomfort persists obtain medical attention. DO NOT induce vomiting.

Section 5- Fire Fighting Measures

EXTINGUISHING MEDIA: Carbon dioxide, water, water fog, dry chemical.

HAZARDOUS COMBUSTION PRODUCTS: solutions of copper sulfate are acidic and can react with magnesium to evolve flammable hydrogen gas.

SPECIAL FIRE FIGHTING PROCEDURES: none.

FLASH POINT: not applicable

FLAMMABLE LIMITS: not applicable

AUTOIGNITION TEMPERATURE: not applicable

MECHANICAL IMPACT AND STATIC DISCHARGE RISK: none.

EXPLOSION DATA: Anhydrous copper sulfate causes hydroxylamine to ignite. Nitromethane and

copper salts spontaneously form explosive materials.

Section 6- Accidental Release Measures

PERSONAL PROTECTION: Splash goggles, lab coat.

RESPIRATORY PROTECTION: Whenever dust in the worker's breathing zone cannot be controlled with ventilation the workers should wear respirators or dust masks approved by NIOSH or comparable certification organizations to protect from airborne dust.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: This tableted product is generally non-irritating to intact skin. Skin irritation may occur where skin has been damaged. In this situation minimize skin contact by wearing gloves.

Prevent large quantities of this product from contacting vegetation or waterways; large spills could kill vegetation or fish. If spilled, vacuum or sweep-up the material. Federal regulations (49 CFR 172)t require notification for spills of this product containing in excess of 10 kg of cupric sulfate. State and local regulations may contain different requirements; consult local authorities.

Section 7- Handling and Storage

Safe Handling: Avoid breathing concentrated dust and wear dust mask as required to prevent contact with eyes.

Safe Storage: Protect from excessive heat and moisture, store away from alkalis. Store in sealed container in a cool, well-ventilated area.

Section 8- Exposure Controls/Personal Protection

EXPOSURE LIMITS: None in this tablet form.

ENGINEERING CONTROLS: no specific measures required for this tableted product. Use local exhaust ventilation **to** keep airborne levels of powdered product below recommended exposure limits **PERSONAL PROTECTION:**

Splash goggles, lab coat.

RESPIRATORY PROTECTION: Whenever dust in the worker's breathing zone cannot be controlled with ventilation the workers should wear respirators or dust masks approved by NIOSH or comparable certification organizations to protect from airborne dust.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: This tableted product is generally non-irritating to intact skin. Skin irritation may occur where skin has been damaged. In this situation minimize skin contact by wearing gloves.

Section 9- Physical and Chemical Properties

BOILING POINT: n/a VAPOR PRESSURE @ 68°F: n/a VAPOR DENSITY: (air = 1): n/a SOLUBILITY IN WATER: soluble

VISCOSITY: n/a EVAPORATION RATE (n-butyl acetate =1): n/a

FREEZING POINT: n/a PHYSICAL STATE: solid tablet

VOLATILE ORGANIC CMPDS (total VOCs): none for inorganic materials.

Section 10- Stability and Reactivity

CHEMCIAL STABILITY: Stable

INCOMPATABILITY (materials to avoid): alkalis, Potassium, Acetic Anhydrate, metals. CONDITIONS OF REACTIVITY / TO AVOID: high temperatures, incompatible materials

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: none.

HAZARDOUS POLYMERIZATION: will not occur

Section 11- Toxicological Information

Components	CAS#	% by weight	LD ₅₀ Species	LCD ₅₀ species
Boric Acid (H ₃ BO ₃)	0043-35-3	65-85	2660 mg/kg oral-rat	n/a
CQC-2,6 dichloroquinone -4-chloroimide) (C ₆ H ₅ PO ₄ Na ₂)	101-38-2	5-10	n/a	n/a
Cupric Sulfate	7758-98-7	4-8	300 mg/kg oral-rat	n/a

Special Remarks: Powdered product may irritate the skin, eyes, respiratory tract and digestive tract with nausea, vomiting and diarrhea. May affect CNS: depression, headache, dizziness, drowsiness, collapse, unconsciousness and coma. Can also affect the peripheral nervous system: cardiovascular system, blood, liver, urinary system and endocrine system. Boric acid can accumulate in the body with repeated exposure and cause dermatitis.

Cupric Sulfate may cause ulceration of the nasal septum if inhaled in excessive quantities.

Section 12- Ecological Information

No data are available on the adverse effects of this material on the environment. Not listed as a toxic pollutant (40 CFR 401.15) in the Clean Water Act (CWA) Section 307/311. Based on the chemical composition of this product it is assumed that it can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system.

Section 13- Disposal Considerations

Dispose of in accordance to Local, State and Federal Regulations. This product is not listed as a hazardous waste according to US Federal RCRA regulations. Refer to "40 CFR Protection of the Environment Parts 260-299". Consult your local, state or federal Environmental Protections Agency before disposing of any chemicals. DO NOT flush to sanitary sewer or waterway.

Section 14- Transport Information

UN NUMBER: none

PROPER SHIPPING NAME: none

HAZARD CLASS n/a PACK GROUP n/a

IATA HAZARD CLASS/ pack group: not regulated

IMDG HAZARD CLASS: not regulated Canadian TDG Class/Division: n/a

HAZARD SYMBOLS: n/a

Section 15- Regulatory Information

TSCA (Toxic Substance Control Act)

Components of this product are listed on the TSCA Inventory

SARA Title III (Superfund Amendments and Reauthorization Act)

Section 302:

Cupric sulfate listed as hazardous

Section311/312

Hazard Categories: immediate acute health hazard

Section 313 Reportable Ingredients:

copper compounds

CERCLA (Comprehensive Response Compensation and Liability Act):

The Cercla has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ) for this mixture containing in excess of 10 lbs of Cupric sulfate..

California Proposition 65:

none listed.

WHMIS Canadian Workplace hazardous materials information system:

hazard classification: D-2B (cupric sulfate) material causing toxic effects,

IDL (Canadian Ingredient Disclosure List)

Components of this product listed on the Canadian Ingredient Disclosure List are shown in Section 3.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product are on the European Inventory of Existing Commercial Chemical Substances

EC Risk Phrases

R5- heating may cause an explosion R22- harmful if swallowed R36/37/38- irritating to eyes, respiratory system and skin

EC Safety Phrases

S22- do not breathe dust S24/25- in case of contact with eyes rinse immediately with plenty of water S36/37- wear suitable protective clothing and gloves S45- in case of accident or if you feel unwell, seek medical advice immediately S61- avoid release to environment

Section 16- Other Information

SDS prepared by: Fred Weber

President

Weber Scientific

Telephone 609-584-7677

The information contained herein is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that the information is current, applicable, and suited to the circumstances of use. Weber Scientific assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Weber Scientific assumes no responsibility for injury caused by abnormal use of this product even if reasonable safety procedures are followed.