

Safety Data Sheet

Section 1: Identification of the substance, company and intended use.

1.1 Identification of the substance/mixture

Product No.: 1492-1496, Component D, Copper(II) Sulfate
Product Name: Click-&-Go Plus OPP Protein Synthesis Assay
Synonym: Cupric sulfate anhydrous; Cupric sulfate; Copper monosulfate

1.2 Identified use of the substance

Identified Use: Laboratory chemicals, manufacture of substances

1.3 Company/undertaking identification

Click Chemistry Tools	Tel: 1-480-584-3340
8341 E. Gelding Drive	Fax: 1-866-717-2037
Scottsdale, AZ 85260	

Section 2: Composition/Information on Ingredients

CAS No.: 7758-99-8
Mol. Formula: $\text{CuSO}_4 \times 5 \text{H}_2\text{O}$
Mol. Weight: 249.69
Assay: N/A

Section 3: Hazards Identification

3.1 Classification of the substance or mixture

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute oral toxicity	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

3.2 GHS Label elements, including precautionary statements

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :	Warning
Hazard statements (GHS-US) :	H302 - Harmful if swallowed H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (GHS-US) :	P264 - Wash exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P273 - Avoid release to the environment P311 - Call a POISON CENTER or doctor/physician P330 - If swallowed, rinse mouth P391 - Collect spillage P501 - Dispose of contents/container to comply with local, state and federal regulations

3.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

Section 4: First-Aid Measures

4.1 Description of first aid measures

If inhaled

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Obtain medical attention if pain, blinking or redness persists.

If swallowed

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Swallowing a small amount of this material will result in serious health hazard.

4.3 Indication of any immediate medical attention and special treatment needed

No additional information available

Section 5: Fire Fighting Measures

5.1 Extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

5.2 Advice from firefighters

Standard procedure for chemical fires.

5.3 Further information

No data available

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4 Reference to other sections

See Section 8 for additional information.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

For research use only.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits

Contains no substances with occupational exposure limit values

Engineering measures

Ensure adequate ventilation, especially in confined areas

8.2 Exposure controls

Personal Protective Equipment

Respiratory protection

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards

Hand protection

Wear suitable gloves Glove material: Compatible chemical-resistant gloves

Eye/Face protection

Wear tight sealing safety goggles

Skin/Body Protection

Wear suitable protective clothing

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice

Control of Environmental exposure

No special environmental precautions required

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Liquid
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	Not Applicable
e) Melting / Freezing points	°C and °F Mixture has not been tested
f) Initial boiling point & boiling range	°C and °F Mixture has not been tested
g) Flash point	°C and °F Mixture has not been tested
h) Evaporation rate	No data available
i) Flammability (solid, gas)	Non Flammable
j) Explosive limits	Mixture has not been tested
k) Vapor pressure	Mixture has not been tested
l) Vapor pressure	Mixture has not been tested
m) Relative density	Mixture has not been tested
n) Water solubility	Soluble in water
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available

t) Oxidizing properties

No data available

9.2 Other safety information

No data available.

Section 10: Stability and Reactivity

10.1 Reactivity

None known

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4 Conditions to avoid

Extremely high or low temperatures

10.5 Incompatible materials

Strong reducing agents. Strong bases.

10.6 Hazardous decomposition products

Sulfur compounds. Copper

Section 11: Toxicological Information

11.1 Information on toxicological effects

Likely routes of exposure:

Skin and eye contact

Acute Toxicity:

Oral; Harmful if swallowed

11.2 Principal Routes of Exposure

Irritation

Conclusive but not sufficient for classification

Corrosivity

Conclusive but not sufficient for classification

Sensitization

Conclusive but not sufficient for classification

STOT - Single Exposure

Conclusive but not sufficient for classification

STOT - Repeated Exposure	Conclusive but not sufficient for classification
Carcinogenicity	Conclusive but not sufficient for classification
Mutagenicity	Conclusive but not sufficient for classification
Reproductive toxicity	Conclusive but not sufficient for classification
Aspiration hazard	Conclusive but not sufficient for classification

Section 12: Ecological Information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No information available

12.3 Bio accumulative potential

No information available

12.4 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5 Other adverse effects

No information available

Section 13: Disposal Considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

Section 14: Transport Information

14.1 IATA / ADR / DOT-US / IMDG

UN3082 Environmentally hazardous substances, liquid, n.o.s. (Copper Sulfate), 9, III

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid n.o.s. Copper sulfate
Transport hazard class(es)	9- Class 9- Miscellaneous hazardous material 49 CFR 173.140
Packing group	III – Minor danger
Environmental hazards	Dangerous to the environment
Special precautions for user	Not Applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Applicable

Section 15: Regulatory Information

15.1 SARA 313 Components

This product is not regulated by SARA

15.2 Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

15.3 California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.4 WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16: Other Information

Revision date : 12/21/2018

Other information : None.

Full text of H-phrases: see section 16:

H301	Toxic if swallowed
H302	Harmful if swallowed
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



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End of SDS