

Safety Data Sheet

Chlorophyll

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Chlorophyll

Synonyms/Generic Names: Chlorophyllin, coppered trisodium salt

SDS Number: 183.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact:Ward's Science 5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692 (800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: No known OSHA hazards.

Target Organs: None

Signal Word: None

Pictograms: None

GHS Classification:

Not a dangerous substance according to GHS.

GHS Label Elements, including precautionary statements:

Hazard Statements:

None

Precautionary Statements:

None

Potential Health Effects

Eyes	May cause eye irritation.	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.	
Skin	May be harmful if absorbed through skin. Causes skin irritation.	
Ingestion	May be harmful if swallowed.	

NFPA Ratings		
Health	0	
Flammability	0	
Reactivity	0	
Specific hazard	Not Available	

HMIS Ratings	
Health	1
Fire	0
Reactivity	0
Personal	А

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Chylorophylin	100	11006-34-1	234-242-5	$C_{34}H_{30}CuN_4O_5$	683.79 g/mol

4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention if necessary.		
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not		
	breathing, give artificial respiration. Get medical attention if necessary.		
Skin	Flush with plenty of water and wash using soap. Get medical attention if necessary.		
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If		
	conscious, wash out mouth with water. Get medical attention if necessary.		

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable)	Product is not flammable. Use appropriate media for adjacent fire. Cool
extinguishing media	unopened containers with water.
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective
and precautions for firefighters	clothing, including eye protection and boots.
Specific hazards arising from	Emits toxic fumes (carbon oxides, copper oxides, nitrogen oxides,
the chemical	sodium oxides) under fire conditions. (See also Stability and Reactivity
	section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Sweep up and place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.	
Skin	Wear nitrile or rubber gloves, and apron or lab coat.	
Other	Not Available	

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Bluish-black powder.
Odor	Not Available
Odor threshold	Not Available
рН	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Density	Not Available
Solubility (ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides, copper oxides, nitrogen oxides, sodium oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Acute Toxicity	
Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral - mouse - 7,000 mg/kg

Carcinogenicity

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IARC	No components of this product present at levels greater than or equal to 0.1% is identified
	as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified
	as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Irritation, redness, itchiness.
Eyes	Irritation, redness, watering eyes, itchiness.
Respiratory	Irritation, coughing, wheezing.
Ingestion	Irritation, nausea, vomiting, diarrhea.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ebotoxiony	
Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residues.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	No SARA Hazards
SARA 312	No SARA Hazards
SARA 313	Not Listed
WHMIS Canada	Not Listed

16. OTHER INFORMATION

Revision	Date
Revision 1	01/14/2013

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