



810 Market Avenue
Richmond, CA 94801

Revision Date: 19-Oct-2022

Safety Data Sheet

SECTION 1: Identification of Substance/Mixture and of Company/Undertaking

1.1 Product Identifiers

Trade Name:	COPPER-GREEN® COPPER-GREEN® BROWN
Product Name:	Copper-Green® Wood Preservative Copper-Green® Brown Wood Preservative
EPA Registration No.	66591-1
California DPR No.	66591-1-AA 66591-1-ZA

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses:	Prevents damage and deterioration of wood caused by termites, fungus, mold, rot, and decay. FOR EXTERIOR USE ONLY.
Uses Advised Against:	Not intended for interior use. Do not use on any material other than wood. Not for use on beehives, food or feed surfaces. Do not use in crawl spaces, wall cavities, enclosed basements, and/or poorly ventilated areas.

1.3 Details of the Supplier of the Safety Data Sheet (SDS)

Company:	Green Products Company 810 Market Avenue Richmond, CA 94801-1325 United States
Telephone:	510-235-9667

1.4 Emergency Telephone

Emergency Telephone #	800-535-5053 Infotrac (USA and Canada) 1-352-323-3500 Infotrac (International)
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SECTION 2: Hazards Identification

2.1 Classification of substance or mixture

GHS Classification

Flammable liquids:	Category 3
Aspiration hazard:	Category 1
Eye irritation:	Category 2A
Skin irritation:	Category 2
Specific target organ toxicity: -single exposure; narcotic effects	Category 3

2.2 GHS Label Elements

Hazard Pictogram:



Signal Word:

Danger

Hazard Statements:

H226 Flammable liquid and vapor.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary Statements:

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces.
 No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ventilating/lighting equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P260 Do not breathe dust/fumes/gas/mist/vapors/spray.
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves, protective clothing, eye protection/face protection.

Response

P301 + P310 IF SWALLOWED; Immediately call POISON CENTER/DOCTOR.
 P303 + P361 + P353 IF ON SKIN (or hair); Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340 + P312 IF INHALED; Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/DOCTOR if you feel unwell.
 P305 + P351 + P338 IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P331 Do NOT induce vomiting.
 P332 + P313 If skin irritation occurs; get medical advice/attention.
 P337 + P313 If eye irritation persists; Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Disposal

P503 Refer to manufacturer/supplier/label instructions for information on disposal, recovery, and/or recycling.

2.3 Hazards not otherwise classified (HNOC)

None known.

SECTION 3: Composition/Information on Ingredients**3.1 Substances**

Mixture.

3.2 Mixture**Hazardous Components**

Chemical Name	Synonym	CAS No.	Concentration (vol. %)
copper naphthenate	copper salt of naphthenic acid	1338-02-9	5 - 25
petroleum oil	neutral oil	64742-65-0	25 - 75
petroleum distillate	mineral spirits	64742-47-8	20 - 70

The exact concentration (vol. %) of the components in the mixture have been withheld as a trade secret.

SECTION 4: First Aid Measures**4.1 Description of First Aid Measures****General Advice**

Move out of dangerous area.

Show this safety data sheet to the first responders and/or physician in attendance.

Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

Inhalation

After inhalation: fresh air. Consult a physician.

Skin Contact

In case of skin contact: If on skin, rinse skin well with water. If on clothes, remove all contaminated clothing. If skin irritation persists, consult a physician.

Eye contact

In case of eye contact: Immediately flush/rinse out eyes with plenty of water. Keep eye(s) wide open while rinsing. Remove contact lenses. If eye irritation persists, consult a physician.

If swallowed

Keep respiratory tract clear. Do not induce vomiting. Risk of aspiration! Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, consult a physician and/or take victim to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Eye and skin contact: irritation, redness, rash. Inhalation: dizziness, drowsiness. Ingestion: nausea, gastric upset, may be harmful or fatal if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is advised for inhalation and ingestion.

Notes to Physician: All treatments should be based upon observed signs and symptoms of distress in all patients. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: Firefighting Measures**5.1 Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media

High volume water jet.

5.2 Specific hazards during firefighting

Flammable liquid and vapor.
Carbon oxides, inorganic copper.
Possible development of hazardous combustion gases or vapors.

5.3 Advice for firefighters

Use personal protective equipment. Stay in danger area only with self-contained breathing apparatus.

5.4 Further information

Prevent fire extinguishing water and residues from contaminating surface water or the ground water system. Cool fully closed containers with water spray.

SECTION 6: Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear appropriate personal protection equipment, see section 8.
Do not breathe vapors, aerosols. Ensure adequate ventilation. Vapors can accumulate in low areas.
Keep away from heat and sources of ignition. Avoid substance contact. Evacuate personnel to safe area.

6.2 Environmental precautions

Do not let product enter drains or waterways. Inform respective authorities if the product does enter drains or waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions, see sections 7 and 10. Take up carefully with liquid-absorbent material (e.g. Chemisorb®). Dispose of properly.
Clean up affected area.

6.4 Reference to other sections

For disposal, see section 13.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Keep out or reach of children. Read and follow the directions on the product label.

Advice on safe handling

Wear appropriate personal protection equipment, see section 8. Provide adequate air ventilation. Avoid generation of vapors/aerosols. Do not breathe product. Avoid skin and eye contact. Take precautionary measures against static discharge. Smoking, eating or drinking should be prohibited in product application area.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Do not spray on a naked flame or any incandescent material.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store at temperature of 0 - 32°C (32 - 90°F). Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. Do not transfer to unmarked container. Observe label precautions.

Storage class

Storage class 3: Flammable liquids (TRGS 510)

7.3 Specific end use(s)

Apart from the identified uses and uses advised against stated in section 1.2, no other specific uses are stipulated.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with workplace control parameters

Chemical Name	CAS No.	Value	Control Parameters	Basis
copper naphthenate	1338-02-9	TWA	1 mg/m ³ Cu dust and mist	ACGIH TLV
		IDLH	100 mg/m ³ Cu dust and mist	NIOSH
petroleum distillate	64742-47-8	TWA	100 ppm	ACGIH TLV
			500 ppm	OSHA Z-1
			2,000 mg/m ³	
		IDLH	400 ppm 1,600 mg/m ³	OSHA P0
		TWA	20,000 mg/m ³ ceiling 1,800 mg/m ³ 15 minutes	NIOSH
		TWA	350 mg/m ³	

8.2 Exposure Controls

Appropriate engineering controls

Use preventive eye and skin protection. Provide adequate ventilation. Immediately change contaminated clothing. Wash hands and face after working with substance.

Personal protective equipment

Eye and face protection

Safety glasses and/or face shield, ANSI Z87 approved. Use equipment for eye and face protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand and skin protection

Full contact

Gloves: Nitrile, Viton®, neoprene, polyvinyl chloride

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Splash contact

Gloves: Nitrile, Viton®, neoprene, polyvinyl chloride

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Body protection

Long-sleeve shirts, long pants, socks, and closed toed shoes

Respiratory protection

General and local exhaust ventilation is recommended to maintain vapor exposure below recommended limits. Respiratory protection should be worn when vapors are generated above recommended limits or are unknown. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Note: Protection provided by air purifying respirators against exposure to any hazardous chemical is limited.

General hygiene

Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink, or smoke when using this product. Wash hands before breaks and at the end of each workday.

Control of environmental exposure

Do not let product enter drains or waterways.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Liquid Color: Dark green or dark brown
b) Odor	Pungent, hydrocarbon-like
c) Odor Threshold	No data available
d) pH	n/a
e) Melting point/freezing point	-58 to -48°C (-72 to -56°F)
f) Boiling point	149°C (300°F)
g) Flash point	40°C (104°F) - closed cup
h) Volatile organic compounds (VOC)	342 g/L

i) Evaporation rate	< 1 (butyl acetate = 1)
j) Flammability (solid, gas)	No data available
k) Explosion limits	Upper explosion limit: 6%(V) Lower explosion limit: 0.6%(V)
l) Vapor pressure	< 2.25 mmHg @ 20°C (68°F)
m) Vapor density	< 4.8 @ 20 - 25°C (68 - 77°F)
n) Density	0.851 g/ml
o) Water solubility	Insoluble
p) Solubility in other solvents	Soluble in hydrocarbon solvents
q) Partition coefficient: n-octanol/water	log Kow: 5 - 6.7
r) Autoignition temperature	220 - 270°C (428 - 518°F)
s) Decomposition temperature	No data available
t) Viscosity	Kinematic \leq 20.5 cSt (40°C (104°F))
u) Surface tension	No data available
v) Explosive properties	No data available
w) Oxidizing properties	No data available

SECTION 10: Stability and Reactivity

10.1 Reactivity

Not known to be reactive under normal conditions.

10.2 Chemical stability

Chemically stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Risk of ignition or formation of ignitable gases or vapors with air.

10.4 Conditions to avoid

Heating/warming/sparks/flame/other ignition sources.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon oxides/sulfur oxides/inorganic copper.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Skin corrosion/irritation

Component - CAS No. 64742-47-8

Species - Rabbit

Exposure time - 4 h

Result - Irritation

Serious eye damage/eye irritation

Component - CAS No. 64742-47-8

Species - Rabbit

Result - Irritation

Germ cell mutagenicity

Component - CAS No. 64742-47-8 and 1338-02-9

Assessment - Not expected to cause germ cell mutagenicity

Carcinogenicity

Component - CAS No. 64742-47-8

Assessment - Not classified as a human carcinogen

Component - CAS No. 1338-02-9

Assessment - Chronic exposure to copper salts has been known to produce lung and liver damage which has sometimes progressed to cancer.

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC.

NTP: No ingredient 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 ingredient of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

Component - CAS No. 64742-47-8 and 1338-02-9.

Assessment – Animal testing did not show any effects on fertility.

Specific target organ toxicity (STOT) - single exposure

Component - CAS No. 64742-47-8 and 1338-02-9

Exposure routes - Inhalation

Target organs - Central nervous system

Assessment - May cause drowsiness or dizziness. The substance or mixture is classified as a specific organ toxicant, single exposure, category 3 with narcotic effects.

STOT - repeated exposure

Component - CAS No. 1338-02-9

Exposure routes - Inhalation/Skin contact

Target organs - Central nervous system, kidney/liver/lung

Assessment - May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Component - CAS No. 64742-47-8 and 1338-02-9

Exposure routes – Ingestion/Inhalation

Assessment – May be fatal if swallowed and enters airways.

11.2 Additional Information

Product - Symptoms of overexposure may include headache, dizziness, nausea, and vomiting. Concentrations substantially above threshold limit value (TLV) may cause narcotic effects.

SECTION 12: Ecological Information**12.1 Toxicity**

Component - CAS No. 64742-47-8

Toxicity to fish

Result - LL50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l, Exposure time - 96 h,
Test type - semi-static test.

Toxicity to daphnia and other aquatic invertebrates

Result - EL50 (Daphnia magna (Water flea)) – 1.4 mg/l, Exposure time - 48 h
Test type - semi-static test.

Toxicity to algae

Result - EL50 (Pseudokirchneriella subcapitata (green algae)): 1 mg/l,
End point - Growth rate, Exposure time - 72 h
Test type - static test

Component - CAS No. 64742-47-8 and 1338-02-9

Aquatic toxicity

Acute - Toxic to aquatic life.

Chronic - Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Biodegradability

Component - CAS No. 64742-47-8
aerobic - Exposure time 28 d
Result: 6 % - Readily biodegradable.

Component - CAS No. 1338-02-9
Assessment - Biodegradability not determined

12.3 Bioaccumulation

Product - No data available

12.4 Mobility in soil

Product - No data available

12.5 Other adverse effects

Ozone-Depletion Potential

Product - Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric
Ozone - CAA Section 602 Class 1 Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II
ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A&B)

Additional Ecological Information

Product - An environmental hazard cannot be excluded in the event of unprofessional handling
and/or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal Considerations**13.1 Waste treatment methods**

Disposal of waste

Product - Dispose of waste material in accordance with the national, state, regional, and local regulations. No mixing with other waste. Handle uncleaned containers like the product itself.

Disposal of container

Product container - Dispose of product container in accordance with the national, state regional, and local regulations. Do not reuse empty containers. See product container's label for additional information.

SECTION 14: Transport Information**DOT (Department of Transportation, US)**

UN number: 1268 Hazard Class: 3 Packing group: III
Proper shipping name: Petroleum Products, N.O.S.

Other Information: This product may be reclassified as a combustible liquid for ground transportation. The flash point for this material is greater than 38°C (100°F). Therefore, in accordance with 49 CFR 173.150(f) non-bulk containers (<450 liter or <119 gallon capacity) of this material may be shipped as non-regulated when transported solely by land.

IATA (International Air Transport Association)

UN number: 1268 Hazard Class: 3 Packing group: III
Proper shipping name: Petroleum Products, N.O.S.

IMDG

UN number: 1268 Hazard Class: 3 Packing group: III Flash Point 40 - 46°C
Proper shipping name: Petroleum Products, N.O.S.

SECTION 15: Regulatory Information**SARA 302 and 303**

This product is not known to contain any components that are subject to the reporting requirements of SARA Title III, Section 302 or 303.

SARA 304

This product is not known to contain any components that are subject to the reporting requirements of SARA Title III, Section 304.

SARA 311/312 Hazards

Flammable, Aspiration hazard, Eye irritation, Skin irritation, Specific target organ toxicity -single exposure; narcotic effects.

SARA 313

This product is not known to contain any components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product is not known to contain any hazardous air pollutants (HAP's) as defined by the U.S. Clean Air Act Section 112 (CFR 61).

Clean Water Act

CAS No. 1338-02-9 copper compounds

California Proposition 65

This product is not known to contain any components listed on California's Proposition 65 list.

Massachusetts Right to Know

This product is not known to contain any components subject to Massachusetts Right to Know Act.

New Jersey Right to Know

CAS No. 1338-02-9 copper compounds
 CAS No. 64742-65-0 petroleum oil
 CAS No. 64742-47-8 petroleum distillates

Pennsylvania Right to Know

CAS No. 1338-02-9 copper compounds
 CAS No. 64742-65-0 petroleum oil
 CAS No. 64742-47-8 petroleum distillates

SECTION 16: Other information**HIMS III**

HEALTH	1
FLAMMABILITY	2
INSTABILITY	0

NFPA**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Green Products Company and its Affiliates shall not be held liable for damage resulting from handling or from contact with the above product.

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