

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Champ® WG

EPA Reg. No.: 55146-1 **Product Type:** Fungicide

Company Name: Nufarm Americas Inc.

11901 S. Austin Avenue

Alsip, IL 60803 1-800-345-3330

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,

Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not exactly the same as on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. HAZARDS IDENTIFICATION

PHYSICAL HAZARDS

None

HEALTH HAZARDS:

Acute toxicity, oral Category 4
Acute toxicity, inhalation Category 4
Skin irritation Category 2
Eye damage Category 1
Specific target organ toxicity – Repeated exposure Category 2

ENVIRONMENTAL HAZARDS:

Hazardous to aquatic environment, acute

Category 1

Hazardous to aquatic environment, chronic

Category 1

SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Harmful if swallowed or inhaled. Causes skin irritation. Causes serious eye damage. May cause damage to organs (upper respiratory tract, liver, and kidney) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.









PRECAUTIONARY STATEMENTS:

Wash hands and exposed skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid breathing dust. Use only outdoors or in well-ventilated area. Wear chemical resistant gloves/eye protection/face protection.

IF SWALLOWED: Call a poison center/doctor if you feel unwell. Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Avoid unintended release to the environment.

Collect spillage.

Store in a well-ventilated place. Keep containers tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	% BY WEIGHT
Copper Hydroxide	20427-59-2	74.69 - 79.31
Kaolin	1332-58-7	< 2.50
Sucrose	57-50-1	7.5 - 8.3
Other Ingredients	Trade Secret	Trade Secret

Synonyms: Mixture containing Copper Hydrate (Cupric Hydroxide)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Most Important symptoms/effects, acute and delayed: May be harmful if inhaled. Eye exposure may cause severe eye irritation. Chronic inhalation exposure may cause damage to upper respiratory tract, liver, and kidney. Chronic inhalation exposure may cause anemia and chronic cough.

Indication of Immediate medical attention and special treatment if needed, if necessary: None expected. .

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

Special Fire Fighting Procedures: Firefighters should wear NIOSH approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): Decomposes to CuO and water above 140°F (60°C).

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. If feasible, copper may be precipitated/ultrafiltrated with caustics or other chemicals and resulting sludge disposed of in a chemical landfill. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

HANDLING: Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in a cool, dry place. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Eye/Face Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves made of any waterproof material. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

	08	OSHA		ACGIH	
Component	TWA	STEL	TWA	STEL	Unit
Copper Hydroxide	1*	NE	1*	NE	mg/m ³
Kaolin	15(T) 5 (R)	NE	2	NE	mg/m ³
Sucrose	15	NE	10	NE	mg/m ³
Other Ingredients	NE	NE	NE	NE	NE

^{*}As copper dusts or mists (CAS No. 7440-50-8)

R= Respirable Fraction

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:Blue-green granules, solidOdor:Mild surfactant odor

Odor threshold: No data available

pH: 8.71

T= Total Dust

Melting point/freezing point: No data available Initial boiling point and boiling range No data available Flash point: No data available **Evaporation rate:** No data available Flammability (solid, gas): No data available **Upper/lower flammability or explosive limits:** No data available Vapor pressure: No data available Vapor density: No data available Relative density: 0.815 g/cc Solubility(ies): Dispersible Partition coefficient: n-octanol/water: No data available **Autoignition temperature:** No data available **Decomposition temperature:** No data available Viscosity: No data available

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be

construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Excessive heat. Incompatible Materials: Acids and sulfur.

Hazardous Decomposition Products: Decomposes to CuO and water above 140°F (60°C).

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin contact, inhalation

Symptoms of Exposure:

Eye Contact: Mildly irritating based on toxicity studies.

Skin Contact: Minimally toxic and slightly irritating based on toxicity studies.

Ingestion: Slightly toxic if ingested based on toxicity studies. **Inhalation:** Moderate toxicity based on toxicity studies.

Delayed, immediate and chronic effects of exposure: None expected

Toxicological Data:

Data from laboratory studies conducted are summarized below:

Oral: Rat LD_{50} : 1,098 mg/kg (females) **Dermal:** Rat LD_{50} : >5,000 mg/kg **Inhalation:** Rat 4-hr LC_{50} : 1.53 mg/L

Eye Irritation: Rabbit: Severely irritating (MMTS = 57.0) **Skin Irritation:** Rabbit: Moderately irritating (PDII = 3.8)

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated ingestion of copper salts may result in anemia, liver, and kidney damage. Chronic inhalation exposure may cause a metallic taste in the mouth, irritation of the upper respiratory tract such as the nasal mucosa that may progress to perforation of the nasal septum. Chronic cough may also occur. Copper hydroxide, which comprises 77% of this product, governs the toxicity of the product. The remaining components have low to negligible toxicity.

Carcinogenicity / Chronic Health Effects: Low chronic toxicity unless excessive exposure is encountered. Excessive exposure to copper by inhalation may result in irritation of the upper respiratory tract which, if severe, may lead to perforation of the nasal septum after long periods of exposure. This product contains 7 to 8% of an inert carrier that, itself, contains a small fraction of crystalline silica. Although crystalline silica is associated with silicosis (which can cause pulmonary fibrosis) and lung cancer, the International Agency for Research on Cancer (IARC) has evaluated this inert vehicle and designated it as a Class 3 (insufficient evidence in either animals or humans to conclude carcinogenic activity). This product contains less than 0.1% crystalline silica.

Reproductive Toxicity: No information available. Developmental Toxicity: No information available.

Genotoxicity: No information available.

Assessment of Carcinogenicity:

Component	Regulatory Agency Listing As Carcinogen			
	ACGIH	IARC	NTP	OSHA
Copper hydroxide	No	No	No	No
Kaolin	No	No	No	No
Sucrose	No	No	No	No
Other Ingredients	No	No	No	No

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Copper Hydroxide:

96-hour LC $_{50}$ Bluegill: 180 mg/l Bobwhite Quail Oral LC $_{50}$: >340 mg/kg 96-hour LC $_{50}$ Rainbow Trout: 0.023 mg/l Mallard Duck 8-day Dietary LD $_{50}$: >10,000 mg/l 48-hour EC $_{50}$ Daphnia: 0.0065 mg/l Bobwhite Quail 8-day Dietary LD $_{50}$: >10,000 mg/l

Honeybee LD₅₀ 98 ug/bee

Environmental Fate:

The degree of mobility of copper in the environment depends upon the pH of ambient soils and waters. The higher the acidity, the more soluble copper salts are and, hence, the more mobile. Partitioning of copper into the air is negligible due to the low vapor pressure of copper salts.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest Environmental Protection Agency regional office for guidance.

Container Handling and Disposal:

NONREFILLABLE PLASTIC CONTAINERS

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Nonrefillable Containers 5 Gallons or Less:

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless permitted by state and local ordinance If burned stay out of smoke.

Nonrefillable containers larger than 5 Gallons:

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless permitted by state and local ordinance If burned stay out of smoke.

NONREFILLABLE BAGS

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn unless permitted by state and local ordinance. If burned, stay out of smoke.

REFILLABLE DRUM WITH A NONREFILLABLE LINER

CONTAINER HANDLING: Refill this container with pesticide only. Do not use this container for any other purpose. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities by burning. If burned, stay out of smoke. If drum is contaminated and cannot be reused, dispose of in the same manner required for its liner. To recycle, contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

14. TRANSPORTATION INFORMATION

DOT

< 882 pounds:

Not Regulated

≥ 882 pounds:

UN3077, RQ, Environmentally hazardous substance, solid, n.o.s., (Copper Hydroxide), 9, III, Marine Pollutant

IMO / IMDG

UN 3077, RQ, Environmentally hazardous substance, solid, n.o.s., (Copper Hydroxide), 9, III, Marine Pollutant

IATA

Not regulated

15. REGULATORY INFORMATION

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

DANGER. Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust.

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Immediate and delayed

Section 313 Toxic Chemical(s):

None

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

Date of Issue: June 15, 2015 Supersedes: May 5, 2015