



ENFORCER Products
 A Division of Acuity Specialty Products Group,
 Inc.
 P.O. Box 1060
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 1-888-805-HELP

Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name **Zep Root Kill II**

Product Code **ZRK2**

Date of issue **10/21/04** **Supersedes** 12/04/03

This product is a registered pesticide. Number: 1278-8-40849

Emergency Telephone Numbers **For MSDS Information:**
 Compliance Services (404) 352-1680

For a Medical Emergency:
 INFOTRAC
 (877) 541-2016 (Toll Free - Calls Recorded)

For a Transportation Emergency:
 CHEMTREC
 (800) 424-9300 (Toll Free - Calls Recorded)

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
Copper Sulfate Pentahydrate; Cupric Sulfate; Blue Vitriol	7758-99-8	99	OSHA PEL (United States). TWA: 1 mg/m ³ 8 hour(s). Form: Dusts and Mists ACGIH TLV (United States). TWA: 1 mg/m ³ 8 hour(s). Form: Dusts and Mists

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Dermal contact. Eye contact. Inhalation.

Skin Hazardous in case of skin contact (irritant). Direct contact may cause irritation and redness. Prolonged or repeated contact may dry skin and cause irritation.

Eyes Hazardous in case of eye contact (corrosive). Eye contact can result in corneal damage or blindness. Inflammation of the eye is characterized by redness, watering, and itching.

Inhalation Hazardous in case of inhalation. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Over-exposure by inhalation may cause respiratory irritation.

Ingestion May be fatal if swallowed. Can cause gastrointestinal disturbances.

HMIS	
Health	3
Fire Hazard	0
Reactivity	0
Personal Protection	E

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects The substance is toxic to kidneys and the nervous system. Repeated or prolonged exposure to the substance can produce target organs damage. Prolonged or repeated contact may dry skin and cause irritation.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point Not applicable.
Flammability Non-flammable.
Fire Hazard Not applicable.

Flammable Limits Not applicable.

**Fire-Fighting Procedures**

Use an extinguishing agent suitable for surrounding fires. Do not release runoff from fire to sewers or waterways.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see Section 8). Sweep up and place in suitable clean, dry containers for reclamation or later disposal.

Section 7. Handling and Storage

Handling Avoid contact with eyes, skin and clothing. Avoid the inhalation of dust, particulates and spray mist arising from the application of this preparation. Keep away from food, drink and animal feeding stuffs. Apply this product only as specified on the label. Do not reuse product container. After contact with skin, wash immediately with plenty of water.

Storage Keep container dry and tightly closed. Keep container in a cool, well-ventilated area. Store copper sulfate in stainless steel, fiberglass, polypropylene, PVC's or plastic equipment. Keep away from galvanized pipe and nylon equipment. Contains moisture sensitive material; store in a dry place. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection**Personal Protection**

Eyes Safety glasses.
Body Gloves. Synthetic apron. Wear apron or coverall if potential for exposure to splashes.
Respiratory Wear appropriate respirator when ventilation is inadequate.

Protective Clothing (Pictograms)**Section 9. Physical and Chemical Properties**

Physical State Solid. (Crystals.)

Color Blue.

pH Not applicable.

Odor Odorless.

Boiling Point Not applicable

Vapor Pressure Not applicable.

Specific Gravity 2.284 (Water = 1)

Vapor Density Not applicable

Solubility Easily soluble in hot water.

Evaporation Rate Not applicable

Soluble in cold water.

VOC (Consumer) Not applicable

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Incompatible with aluminum and magnesium.

Hazardous Polymerization Not available.

Hazardous Decomposition Products Cupric oxide and sulfur oxides (SO₂, SO₃...)

Section 11. Toxicological Information**Toxicity to Animals****Copper Sulfate Pentahydrate:**

ORAL (LD50): Acute: 352 mg/kg [Rat].

DERMAL (LD50): Acute: >5050 mg/kg [Rabbit].

Section 12. Ecological Information

Ecotoxicity Toxic to aquatic organisms.

Biodegradable/OECD Not available.

Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream Non-regulated waste

Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cupric Sulfate) or Consumer Commodity ORM-D in Limited Quantity

DOT Classification Class 9: Miscellaneous hazardous material.

UN number UN 3077

TDG Classification TDG Class 9.2: Environmentally hazardous material.

Section 15. Regulatory Information**U.S. Federal Regulations** SARA 313 toxic chemical notification and release reporting:

Copper Sulfate Pentahydrate

Clean Water Act (CWA) 311: Copper Sulfate Pentahydrate (RQ 10 lbs)

Clean air act (CAA) 112 regulated toxic substances: No products were found.

State Regulations

California prop. 65: No products were found.

WHMIS (Canada)

Class D-1B: Material causing immediate and serious toxic effects (TOXIC).

Class E: Corrosive solid.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.