

Material Safety Data Sheet



Zep Inc.
1310 Seaboard Industrial Blvd.
Atlanta, GA 30318
1-877-793-7776

Section 1. Chemical Product and Company Identification

Product name ZEP CONCENTRATED WEED KILLER AND SOIL STERILANT
Product use Herbicide.
Product code R056
Date of issue 08/13/08 **Supersedes**

This product is a registered pesticide. EPA ID No. 1270-113

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 1-877-793-7776

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

For Transportation Emergency
CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

Prepared By

Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

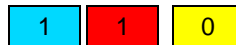
Emergency overview

WARNING

CAUSES EYE IRRITATION. HARMFUL IF ABSORBED THROUGH SKIN. HARMFUL IF SWALLOWED.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

*Hazard Determination System (HDS): Health, Flammability, Reactivity



Acute Effects

Routes of Entry

Dermal contact. Eye contact. Inhalation.

Eyes

Causes eye irritation. Liquid in eye may cause irritation with possible damage if not rinsed immediately. Inflammation of the eye is characterized by redness, watering and itching.

Skin

Direct contact may cause irritation and redness. May cause allergic reactions in certain individuals. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation

Avoid inhalation of vapor, spray or mist. Over-exposure by inhalation may cause respiratory irritation.

Ingestion

Harmful if swallowed. Can cause gastrointestinal disturbances.

Chronic effects

Prolonged or repeated contact may dry skin and cause irritation.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

ALKYL (C16-C18) METHYL ESTERS	67784-80-9	>90
N-METHYL-PYRROLIDONE ; 1-methyl-2-pyrrolidone; m-pyrol	872-50-4	1 - 5
BROMACIL; (5-bromo-3-sec-butyl-6-methyluracil)	314-40-9	1.52

Section 4. First Aid Measures

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.

Inhalation

Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



Flash Point	Closed cup: >93.33°C (>200°F)
Flammable Limits	Not available.
Flammability	Non-flammable. Combustible when exposed to heat or flame.
Fire hazard	Rags, steel wool or other wastes soaked with product may spontaneously catch fire if improperly discarded. In a fire or if heated, a pressure increase will occur and the container may burst.
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire. Cool closed containers exposed to fire with water. 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). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.
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Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Do not ingest. Do not reuse container. Wash thoroughly after handling. Apply this product only as specified on the label.
Storage	Keep away from sources of ignition. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Rags, steel wool or other wastes soaked with product may spontaneously catch fire if improperly discarded. Do not contaminate water by cleaning of equipment or disposal of wastes. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection**Product name**

N-METHYL-PYRROLIDONE ; 1-methyl-2-pyrrolidone; m-pyro
BROMACIL; (5-bromo-3-sec-butyl-6-methyluracil)

Exposure limits

ACGIH TLV (United States).
TWA: 100 ppm 8 hour(s).
ACGIH TLV (United States).
TWA: 10 mg/m³ 8 hour(s).

Personal Protective Equipment (PPE)

Eyes	Chemical splash goggles or face shield.
Body	Wear appropriate protective clothing to prevent skin contact. Recommended: Nitrile gloves. Neoprene gloves. Rubber gloves. Viton gloves. Synthetic apron.
Respiratory	Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

Physical State	Liquid. [Thin liquid]	Color	Brown.
pH	Not applicable	Odor	Solvent-like.
Boiling Point	>315.5°C (>599.9°F)	Vapor Pressure	Not determined.
Specific Gravity	0.881	Vapor Density	Not determined.
Solubility	Emulsifies in water.	Evaporation Rate	Not determined.
		VOC (Consumer)	17.59 (g/l). 0.15 lbs/gal (2.00%)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Keep away from heat, sparks and flame. Slightly reactive or incompatible with the following materials: oxidizing materials and acids. May be reactive with acidic clay.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂)

Section 11. Toxicological Information**Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Alkyl Methyl Esters	LD50 Oral	Rat	>15000 mg/kg	-
n-Methyl-Pyrrolidone	LD50 Oral	Mouse	5270 mg/kg	-
	LD50 Oral	Rat	3600 mg/kg	-

Section 12. Ecological Information

Environmental Effects Keep out of waterways.

Aquatic Ecotoxicity

Not available.

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Non-hazardous waste

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	None.	Not a DOT controlled material (United States).			
IMDG Class	Not determined.				

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG* : Packing group

Section 15. Regulatory Information**U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

Product name

n-Methyl-Pyrrolidone
Bromacil

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations**California Prop 65**

WARNING: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: n-Methyl-Pyrrolidone

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.

*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.