# MATERIAL SAFETY DATA SHEET



# **ELEMENT\* 4 HERBICIDE**

Emergency Phone: 800-992-5994 Dow AgroSciences LLC Indianapolis, IN 46268

Effective Date: 11-Oct-06 Product Code: 107207 MSDS: 004788

#### 14. TRANSPORT INFORMATION:

U.S. DEPARTMENT OF TRANSPORTATION INFORMATION

FOR ALL NON-BULK PACKAGES SHIPPED BY AIR, LAND OR WATER:

This material is not regulated for transport.

FOR BULK PACKAGES SHIPPED BY LAND: COMBUSTIBLE LIQUID, N.O.S. (CONTAINS KEROSENE)/COMBUSTIBLE LIQUID/NA1993/PGIII

#### 15. REGULATORY INFORMATION:

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

### **U.S. REGULATIONS**

**SARA 313 INFORMATION**: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions; to meet the following categories:

An immediate health hazard A delayed health hazard A fire hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

**STATE RIGHT-TO-KNOW:** The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

**CHEMICAL NAME** 

**CAS NUMBER** 

LIST

Kerosene

008008-20-6

PA1 NJ3

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%). PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

**OSHA HAZARD COMMUNICATION STANDARD:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health 2 Flammability 2

Reactivity 1

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or

**SUPERFUND):** To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

### **16. OTHER INFORMATION:**

MSDS STATUS: Revised Sections: 2 & 3

Reference: DR-0196-5102 Replaces MSDS dated: 5/10/05

The Information Herein Is Given In Good Faith, But No Warranty, Express or Implied, Is Made. Consult Dow AgroSciences for Further Information.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

These precautions are suggested for conditions where a potential for exposure exists. Emergency conditions may require additional precautions.

### **EXPOSURE GUIDELINE(S):**

Triclopyr: Dow AgroSciences Industrial Hygiene Guide is 2 mg/M³ as acid equivalent, Skin.

Kerosene: Dow AgroSciences Industrial Hygiene Guide is 10 mg/M<sup>3</sup>.

A "skin" notation following the exposure guideline refers to the potential for dermal absorption of the material. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

**ENGINEERING CONTROLS**: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

**RESPIRATORY PROTECTION**: Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations, use a NIOSH approved air-purifying respirator.

**SKIN PROTECTION:** Use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full body suit will depend on operation. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly.

**EYE/FACE PROTECTION**: Use safety glasses.

APPLICATORS AND ALL OTHER HANDLERS: Refer to the product label for personal protective clothing and equipment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: >302°F (150°C) initial

VAPOR PRESSURE: 0.1 mm @ 37.8°C (kerosene)

VAPOR DENSITY: >1

**SOLUBILITY IN WATER: Emulsifies** 

SPECIFIC GRAVITY: 1.08
APPEARANCE: Amber liquid

**ODOR:** Kerosene-like

### 10. STABILITY AND REACTIVITY:

**STABILITY:** (CONDITIONS TO AVOID) Combustible. Avoid sources of ignition if temperature is near or above flash point. Stable under normal storage conditions.

**INCOMPATIBILITY:** (SPECIFIC MATERIALS TO AVOID) Acid, base, and oxidizing material.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Nitrogen oxides, hydrogen chloride, and phosgene may result under fire conditions.

HAZARDOUS POLYMERIZATION: Not known to occur.

#### 11. TOXICOLOGICAL INFORMATION:

**POTENTIAL HEALTH EFFECTS:** This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause slight temporary eye irritation. Corneal injury is unlikely.

SKIN: Prolonged or repeated contact may cause skin irritation. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. With the dilute mix, no allergic skin reaction is expected. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Repeated skin contact may result in absorption of harmful amounts. The LD<sub>50</sub> for skin absorption is >2000 mg/kg (rabbits) and >5000 mg/kg (rats).