

# MATERIAL SAFETY DATA SHEET

Total Solutions  
P.O. Box 240014  
Milwaukee, WI 53224



GENERAL INFORMATION NUMBER: (414) 354-6417  
CHEMTREC: (800) 424-9300

REVISION DATE: January 6, 2009  
DATE OF ISSUE: January 6, 2009

## I - Product Identification

### Vacate

PRODUCT CODE: 0314

CHEMICAL FORMULATION: Solvent based non-selective residual herbicide.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0  
HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

## II - Hazardous Ingredients

Values reported as TWA unless noted.

SUBSTANCE	APPROX %	OSHA PEL	ACGIH TLV	EPA 40 CFR:			CAS #
				302	355	372	
Isoctyl ester of 2,4-Dichlorophenxyacetic acid	1.10	10 mg/m <sup>3</sup>	N/E	Y	N	Y	1928-43-4
Bromacil	0.61	N/E	10 mg/m <sup>3</sup>	N	N	Y	314-40-9

Key: PEL: Permissible Exposure Limit TLV: Threshold Limit Value C: Ceiling level STEL: Short Term Exposure Limit  
N/A: Not Applicable N/D: Not Determined N/E: Not Established Y: Yes N: No  
302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).  
355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).  
372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

## III - Physical Data

BOILING POINT (°F): N/D SPECIFIC GRAVITY (WATER = 1): 0.84  
VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): <2.0  
VAPOR DENSITY (AIR = 1): N/D EVAPORATION RATE (WATER = 1): N/D  
SOLUBILITY IN WATER: Insoluble pH: N/A  
APPEARANCE AND ODOR: Clear colorless to slightly yellow liquid; mild hydrocarbon odor

## IV - Fire and Explosion Hazard Data

FLASH POINT (°F): N/D (TEST METHOD):  
FLAMMABLE LIMITS IN AIR (VOLUME %) UPPER: N/D LOWER: N/D  
EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical.  
SPECIAL FIRE FIGHTING PROCEDURES: Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus. Minimize amount of water used to fight fire as run-off may cause pollution.  
UNUSUAL FIRE AND EXPLOSION HAZARD: Solvent vapors may cause flashback.

---

**V - Reactivity Data**

---

**STABILITY:** Stable

**INCOMPATIBILITY:** Strong oxidizers.

**CONDITIONS TO AVOID:** Excess heat and open flame.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce oxides of carbon.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** None

---

**VI - Health Hazard Data**

---

**ROUTES OF ENTRY INHALATION: X EYE CONTACT: X SKIN CONTACT: X INGESTION: X**

**INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS:** None.

**EFFECTS OF OVEREXPOSURE**

**IF IN EYES:** Severe irritation, redness, tearing and blurred vision.

**IF ON SKIN:** Redness, dryness and irritation with prolonged or repeated exposure.

**IF SWALLOWED:** Gastrointestinal irritation, nausea, cramps, vomiting.

**IF INHALED:** Irritation to upper respiratory tract, weakness, headache, nausea, unconsciousness.

**EMERGENCY AND FIRST AID PROCEDURES**

**IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.

**IF ON SKIN:** Remove and launder all affected clothing. Wash with soap and water. If irritation persists, obtain medical attention.

**IF SWALLOWED:** Contact physician or poison control center immediately. Do not induce vomiting.

**IF INHALED:** Remove person to fresh air. If breathing has stopped, give artificial respiration. Obtain medical attention.

---

**VII - Spill or Leak Protection**

---

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Contain spill. Ventilate area and remove all sources of ignition. Soak up spilled material with inert absorbent material and place in a properly marked closed container for proper disposal.

**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

---

**VIII - Special Protection Information**

---

**RESPIRATORY PROTECTION:** Use with adequate ventilation. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.

**VENTILATION**

**LOCAL:** Recommended

**MECHANICAL:** Not required

**PROTECTIVE GLOVES:** Chemical resistant.

**EYE PROTECTION:** Safety goggles or face shield.

**OTHER PROTECTIVE EQUIPMENT:** Eyewash station, protective clothing.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place away from heat and open flame.

Keep container tightly closed when not in use. Do not contaminate water, foodstuffs or feed by storage or disposal.

**OTHER PRECAUTIONS:** Keep out of reach of children.

---

**IX - Transportation Information (ground transportation only)**

---

**DOT ID NUMBER:** None

**DOT PROPER SHIPPING NAME:** None

**DOT CLASS:** None

**DOT PACKING GROUP:** None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

---

**REVISION DATE:** January 6, 2009

**Prepared by:** Technical Dept.

**DATE OF ISSUE:** January 6, 2009

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Total Solutions assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.