

MATERIAL SAFETY DATA SHEET

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

REVISION DATE: September 18, 2003
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I - Product Identification

Barren

PRODUCT CODE: 0320

CHEMICAL FORMULATION: Solvent based non-selective residual herbicide.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 2 FLAMMABILITY: 2 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	1.09	10 mg/m ³	N/E	Y	N	Y	1928-43-4
Bromacil	0.98	N/E	10 mg/m ³	N	N	Y	314-40-9
Aliphatic Hydrocarbons	80.0-90.0	N/E	N/E	N	N	N	68476-31-3
2-Butoxyethanol	10.0-20.0	25 ppm (skin)	25 ppm (skin)	N	N	Y	111-76-2

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): 0.875
VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): N/D
VAPOR DENSITY (AIR = 1): N/D EVAPORATION RATE (WATER = 1): > 1.0
SOLUBILITY IN WATER: Insoluble pH: N/A
APPEARANCE AND ODOR: Reddish brown liquid; fuel oil odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): 145 (TEST METHOD): Closed cup
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 PROPER SHIPPING NAME: None**DOT CLASS:** None**DOT ID NUMBER:** 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.

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