



Product: TOUGH BRUSH KILLER
EPA Reg. No.: 62719-226-869
Effective Date: 05/01/2007

MATERIAL SAFETY DATA SHEET
Emergency Phone 800/535-5053

Size	Product Number	UPC Code
½ Gallon	40064	0 49424 40064 5

Note: Be sure to compare the EPA registration number as given on the MSDS with the EPA registration number as given on the label as some products have had the active ingredients changed without a corresponding change in the UPC number or in the item description.

1. INGREDIENTS:

(%W/W, UNLESS OTHERWISE NOTED) Triclopyr (3,5,6-trichloro-2-pyridinyloxyacetic acid), as the triethylamine salt CAS No. 057213-69-1 8.8%

2. PHYSICAL DATA:

BOILING POINT:	Not determined
VAPOR PRESSURE:	Not determined
VAPOR DENSITY:	Not applicable
SOL. IN WATER:	Soluble
SPECIFIC GRAVITY:	1.05 g/ml @ 20 C
APPEARANCE:	Light purple/pink liquid
ODOR:	Ammonia-like odor

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT:	200°F, 93°C
METHOD USED:	Information not available
FLAMMABLE LIMITS:	LFL: N/A UFL: N/A
AUTO-IGNITION TEMP:	N/A
EXTINGUISHING MEDIA:	Water, alcohol foam and CO ₂ .
FIRE & EXPLOSION HAZARDS:	Toxic, irritating vapors may be formed or given off if product is involved in fire. Although product is water-based, it has a flash point due to the present of small amounts of ethanol and triethylamine.
FIRE-FIGHTING EQUIPMENT:	Use positive-pressure, self-contained breathing apparatus and full protective clothing.

4. REACTIVITY DATA:

STABILITY (Conditions to Avoid):	Avoid sources of ignition of temperature is near or above flash point.
INCOMPATIBILITY (Specific Materials to Avoid):	Any oxidizing agent. Consult manufacturer for specific cases.
HAZARDOUS DECOMPOSITION PRODUCTS:	Nitrogen oxides and hydrogen chloride may be formed if product is involved in fire.
HAZARDOUS POLYMERIZATION:	Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ENVIRONMENTAL DATA:	Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washers.
ACTION TO TAKE FOR SPILLS:	Dike large spills. Keep out of streams and domestic water supplies. Absorb small spills in inert material such as dry sand.
DISPOSAL METHOD:	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law and may contaminate groundwater. If these cannot be used according to label instructions, contact your State Pesticide or Environmental Control



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Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

6. HEALTH HAZARD DATA:

ACUTE EXPOSURE (Team 2G)

EYES:

SKIN:

SKIN ABSORPTION:

INHALATION:

INGESTION:

SYSTEMIC (Other Target Organ)

EFFECTS:

CANCER INFORMATION:

TERATOLOGY (BIRTH DEFECTS):

MUTAGENICITY:

REPRODUCTIVE EFFECTS:

May cause moderate irritation with temporary corneal injury.

Essentially non-irritating to skin. Did not cause allergic reactions when tested in guinea pigs.

A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The LD50 for skin absorption in rabbits is greater than 2000 mg/kg.

Single exposures to vapors is not likely to be hazardous. The LC50 for rats is greater than 5.2 mg/l for 4 hours.

Single dose oral toxicity is considered to be low. The oral LD50 is 3743 mg/kg for male rats and 4444 mg/kg for female rats. Small amounts that might be swallowed incidental to normal handling operations are not likely to cause injury; swallowing larger amounts may cause injury.

Excessive exposure may cause liver or kidney effects.

The active ingredient did not cause cancer in long-term animal studies. This product contains a small amount of ethanol; epidemiological studies provide evidence that drinking of alcoholic beverages (containing ethanol) is associated with cancer, and IARC has classified alcoholic beverages as carcinogenic to humans.

For the active ingredient, birth defects are unlikely; even exposures having an adverse effect on the mother should have no effect on the fetus.

Results of in-vitro ("test tube") mutagenicity tests and mutagenicity studies in animals were both negative.

Triclopyr did not interfere with reproduction in animal studies.

7. FIRST AID:

EYES:

SKIN:

INGESTION:

INHALATION:

NOTE TO PHYSICIAN:

Immediately flush eyes with plenty of water for 15 minutes. Call a physician if irritation persists.

Remove contaminated clothing and wash skin with soap and water. If irritation continues, get medical attention.

Call a physician. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

Remove victim to fresh air if effects occur. Consult a physician.

No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINES(S):

VENTILATION:

Ethanol (ethyl Alcohol): ACGIH TLV and OSHA PEL are 1000 ppm. 3,5,6-Trichloro-2-pyridinyloxyacetic acid (Triclopyr), triethylamine salt: Dow Industrial Hygiene Guide (for air concentrations) is 2 mg/m³ as the acid equivalent, skin (skin exposure is expected to be the primary route of exposure). PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

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



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

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

EYE PROTECTION: Use chemical goggles or safety glasses.

9. ADDITIONAL INFORMATION:
SPECIAL PRECAUTIONS TO BE TAKEN
IN HANDLING AND STORAGE:

See label. Keep out of reach of children. Causes eye irritation. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Do not contaminate domestic water supplies or water used for irrigation.

MSDS STATUS: New MSDS.

REGULATORY INFORMATION (Not meant to be all-inclusive-selected regulations represented.):

NOTICE: The information herein is presented in good faith and believed to be accurate as 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. See MSD Sheet for health and safety information.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Section 311 and 312 of the Superfund Amendment and re-authorization 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 Section 1 of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
Ethyl Alcohol	000064-17-5	NJ1,NJ3,PA1
Triethylamine	000121-44-8	NJ1,NJ3,PA1,PA3

NJ1=New Jersey Special Health Hazard Substance (present at greater than or equal to 0.1%).

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%).

PA3=Pennsylvania Environmental 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.



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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

CATEGORIES	RATING
Health	2
Flammability	2
Reactivity	0

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