



MATERIAL SAFETY DATA SHEET

Rohm and Haas Company

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

DIMENSION® Herbicide

Product Code : 75750
Key : 866676-7

Canadian MSDS Date : 03/15/99

COMPANY IDENTIFICATION

ROHM AND HAAS CANADA INC.
2 MANSE ROAD
WEST HILL, ONT. M1E 3T9

EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY : 1-888-862-7770
SPILL EMERGENCY : 1-888-862-7770
CANUTEC : 613-996-6666

DIMENSION® is a trademark of Rohm and Haas Company or one of its subsidiaries or affiliates

2. COMPOSITION/INFORMATION ON INGREDIENTS

No		CAS REG NO	WEIGHT (%)
1	Dithiopyr	97886-45-8	12.7-13.0
2	Solvent naphtha, petroleum, heavy arom.	64742-94-5	87.0-87.3
3	Surfactant mixture	Undisclosed	
4	Related reaction products	None	

See Section 8, Exposure Controls / Personal Protection

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure

Inhalation
Skin Contact
Eye Contact

Inhalation

Inhalation of solvent vapor or mist can cause the following:

- irritation of nose and throat - dizziness - headache - nausea - drowsiness - slurred speech - stupor - unconsciousness

Eye Contact

Direct contact with material can cause the following:

- substantial irritation

Skin Contact

Prolonged or repeated skin contact can cause the following:

- severe skin irritation - defatting and drying of the skin which can lead to irritation and dermatitis - reddening
- skin sensitization in susceptible individuals

Delayed Effects

Repeated overexposure to the active ingredient in this material can cause the following:



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- kidney effects - liver effects - blood effects - thyroid damage - adrenal effects
- Prolonged or repeated overexposure to naphtha can cause the following:
- liver damage - kidney damage
-

4. FIRST AID MEASURES

Inhalation

Move subject to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.

Eye Contact

Flush eyes with a large amount of water for at least 15 minutes. See a physician.

Skin Contact

IMMEDIATELY get under a safety shower. Wash affected skin areas thoroughly with soap and water. Remove and wash contaminated clothing thoroughly. Do not take clothing home to be laundered. Get prompt medical attention.

Ingestion

If swallowed, give 2 glasses of water to drink. IMMEDIATELY see a physician. Never give anything by mouth to an unconscious person. DO NOT induce vomiting, petroleum distillate present. Careful gastric lavage may be indicated.

Note to Physician

In acute cases of naphtha overexposure or ingestion, patients should be evaluated for signs of respiratory distress.

5. FIRE FIGHTING MEASURES

Flash Point	63°C/145°F Tag Closed Cup
Auto-ignition Temperature	443°C/829°F Solvent, naphtha
Lower Explosive Limit	0.8% Solvent, naphtha
Upper Explosive Limit	7.0% Solvent, naphtha

Unusual Hazards

Pesticide particulates can become airborne.

Extinguishing Agents

Use the following extinguishing media when fighting fires involving this material:
- carbon dioxide - dry chemical - water spray - foam

Personal Protective Equipment

Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.



Special Procedures

Contain run-off. Remain upwind. Avoid breathing smoke. Use water spray to cool containers exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection

Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow. Remove all contaminated clothing promptly. Wash all exposed skin areas with soap and water immediately after exposure. Thoroughly launder clothing before reuse. Do not take clothing home to be laundered.

Procedures

Eliminate all ignition sources. Ventilate the spill area. Avoid breathing vapor. Contain spills immediately with inert materials (e.g. sand, earth). Transfer spilled material to suitable containers for recovery or disposal.

WARNING: KEEP SPILLS AND CLEANING RUNOFFS OUT OF MUNICIPAL SEWERS AND OPEN BODIES OF WATER.

NOTE: Spills on porous surfaces can contaminate groundwater.

7. HANDLING AND STORAGE

Storage Conditions

Do not store this material near food, feed or drinking water. The minimum recommended storage temperature for this material is 4.4C/40F. Store in a well ventilated area. Ground all metal containers during storage and handling. Store away from excessive heat (e.g. steampipes, radiators), from sources of ignition and from reactive materials.

Handling Procedures

Do not handle material near food, feed or drinking water. Ground all containers when transferring material. This material is a potential skin sensitizer. See SECTION 8, Exposure Controls/Personal Protection, prior to handling.

Other

CONTAINERS HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue (vapors and/or liquid) follow all MSDS and label warnings even after container is emptied. Residual vapors in empty containers may explode on ignition. DO NOT cut, drill, grind or weld on or near container. Triple rinse (or equivalent) and puncture empty container. Dispose empty container in a sanitary landfill or by incineration as allowed by provincial and local authorities. Avoid inhalation of smoke if incinerated.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit Information

No		CAS REG NO	WEIGHT (%)
1	Dithiopyr	97886-45-8	12.7-13.0
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Comp. No.	Units	ROHM AND HAAS		OSHA		ACGIH	
		TWA	STEL	TWA	STEL	TWA	STEL
1	mg/m3	0.25	0.75	None	None	None	None
2		None	None	None	None	None	None
3		None	None	None	None	None	None
4		None	None	None	None	None	None

Respiratory Protection

A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in 'Exposure Limit Information'.

Up to 10 times the exposure limit: Wear a MSHA/NIOSH approved (or equivalent) half-mask, air-purifying respirator.

Up to 100 times the exposure limit: Wear a MSHA/NIOSH approved (or equivalent) full-facepiece, air-purifying respirator,
OR
full-facepiece, airline respirator in the demand mode.

Above 100 times the exposure limit or Unknown: Wear a MSHA/NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode,
OR
MSHA/NIOSH approved (or equivalent) full-facepiece, airline respirator in the pressure demand mode with emergency escape provision.

Air-purifying respirators should be equipped with MSHA/NIOSH approved (or equivalent) cartridges for protection against pesticides.

Eye Protection

Use chemical splash goggles (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

Hand Protection

Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection:
- Neoprene



Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Rinse and remove gloves immediately after use. Wash hands with soap and water.

Other Protection

Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

Engineering Controls (Ventilation)

Use explosion proof local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Other Protective Equipment

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color	Yellow
State	Liquid
Odor Characteristic	Kerosine odor
pH	4.1 Aqueous solution
Viscosity	11 CPS
Specific Gravity (Water = 1)	0.95
Vapor Density (Air = 1)	4.8 Solvent, naphtha
Vapor Pressure	3 mm Hg @ 25°C/77°F Solvent, naphtha
Melting Point	No Data
Boiling Point	176° to 210°C/349° to 410°F Solvent, naphtha
Solubility in Water	Emulsifiable
Percent Volatility	85% Approximate
Evaporation Rate (BAc = 1)	< 1

See Section 5, Fire Fighting Measures

10. STABILITY AND REACTIVITY

Instability

This material is considered stable. However, avoid contact with ignition sources (e.g. sparks, open flame, heated surfaces).

Hazardous Decomposition Products

There are no known hazardous decomposition products for this material.

Hazardous Polymerization

Product will not undergo polymerization.

Incompatibility

[Avoid contact with strong oxidizing agents.](#)



11. TOXICOLOGICAL INFORMATION

Acute Data

Oral LD50 - rat: 3600 mg/kg
Dermal LD50 - rabbit: >5000 mg/kg
Inhalation LC50 - rat: 11 mg/L for 4 hr
Eye Irritation - rabbit: substantial irritation
Skin Irritation - rabbit: severe irritation

Subchronic/Chronic Data

The following data pertains to studies conducted with the technical material, 91% min. active ingredient:
In repeat dosing studies (13-week), rodents fed dithiopyr technical exhibited liver toxicity; in dogs, changes in body weight, some organ weights, feed efficiency, and anemia with liver, kidney, thyroid, ovarian and adrenal effects occurred.
Similar doses given to dogs for a longer period (12-months) produced a transient increase in vomiting as well as liver toxicity.
Following repeated skin exposure (3-weeks) to dithiopyr technical, mild transient skin irritation and increased liver weights were the only effects observed in rats.

Carcinogenicity Data

The following data pertains to studies conducted with the technical material, 91% min. active ingredient:
Liver toxicity and effects on adrenals and spleen were observed with long-term (18-month) feeding of dithiopyr technical to mice.
Liver and kidney toxicity were observed in a long-term feeding study (24-month) with rats.
Dithiopyr technical did not produce tumors in any of these studies.

Mutagenicity Data

The following data pertains to studies conducted with the technical material, 91% min. active ingredient:
This product does not pose a mutagenic hazard.

Reproductive/Teratology Data

The following data pertains to studies conducted with the technical material, 91% min. active ingredient:
No birth defects were noted in rats and rabbits given dithiopyr technical orally during pregnancy, even at amounts which produced adverse effects on the mothers.
No effects were seen on the ability of male or female rats to reproduce when fed dithiopyr technical for two successive generations.
Decreased weight gain with liver, kidney, thyroid and adrenal toxicity were observed in adult animals, while decreased weight gains and liver toxicity were observed in young animals (pups and weanlings).

Sensitization Data

Skin sensitization - guinea pig: Adverse effects observed.

12. ECOLOGICAL INFORMATION

Environmental Toxicity

Bluegill sunfish (*Lepomis macrochirus*), 96 Hour LC50: 0.47 mg/l



Rainbow trout (*Salmo gairdneri*), 96 Hour LC50: 0.46 mg/l
Daphnia magna, 48 Hour LC50: 5.2 mg/l
Bobwhite quail, 5 Day Dietary LC50: > 5620 ppm
Mallard duck, 5 Day Dietary LC50: > 5620 ppm
Bobwhite quail, Acute oral LD50: > 2250 mg/kg
Honeybee, LD50: 81 ug/bee
Earthworm, 14 Day Immersion LC50: > 1000 mg/kg

This material is toxic to fish.

The above Environmental Toxicity data are from studies conducted on the technical material, 91% min. active ingredient.

13. DISPOSAL CONSIDERATIONS

Procedure

For disposal, incinerate this material at a facility that complies with local, provincial, and federal regulations.

14. TRANSPORT INFORMATION

Shipping Name	NOT APPLICABLE
TDG Classification	NONREGULATED

15. REGULATORY INFORMATION

Workplace Classification

This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

This product is subject to the regulations under the Canadian Pest Control Products Act (P.C.P. Act). Therefore, this product is excluded from the supplier labeling and material safety data sheet requirements as specified in Section 12 of the Hazardous Products Act.

Canadian WHMIS Hazard Classification

Not Applicable.

This product has been classified in accordance with the hazard criteria of the **Controlled Products Regulations (CPR)** and the MSDS contains all the information required by the CPR.

Canadian PCP Information

| [Registration No. 23003 Pest Control Products Act](#)

United States

This product is subject to regulation under the US Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and is therefore exempt from U.S. Toxic Substances Control Act (TSCA) Inventory listing requirements.



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16. OTHER INFORMATION

Rohm and Haas Hazard Rating		Scale
Toxicity	3	4=EXTREME
Fire	2	3=HIGH
Reactivity	0	2=MODERATE
Special	-	1=SLIGHT 0=INSIGNIFICANT

Ratings are based on Rohm and Haas guidelines,
and are intended for internal use.

MSDS Preparation Department

Rohm and Haas Company
Product Integrity Department
Independence Mall West
Philadelphia, PA. 19105

For Canadian information call:
416-284-4711
For General information call:
215-592-3000

Supplier

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West Hill, Ontario
M1E 3T9
(416) 284-4711

Manufacturer

Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA 19106-2399
(215) 592-3000

Product Use

This product is used as a herbicide.

ABBREVIATIONS:

ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
TWA = Time Weighted Average
STEL = Short-Term Exposure Limit
BAc = Butyl acetate
Bar denotes a revision from previous MSDS in this area.

The information contained herein relates only to the specific material identified. Rohm and Haas Company believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. Rohm and Haas Company urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

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