

Material Safety Data Sheet



Engarde™ 25 SG Herbicide

Version 2.0

Revision Date 10/10/2013

Ref. 130000131269

This SDS adheres to the standards and regulatory requirements of Canada and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Engarde™ 25 SG Herbicide
MSDS Number	:	130000131269
Product Use	:	Herbicide
Manufacturer	:	E.I. du Pont Canada Company P.O. Box 2200, Streetsville Mississauga, ON L5M 2H3 Canada
Product Information	:	1-800-387-2122
Medical Emergency	:	1-800-441-3637 (24 hours)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Caution

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing. Avoid breathing dust or spray mist.

Potential Health Effects

This section includes potential acute adverse effects which could occur if this material is not used according to the label.

Eyes : May cause: Irritation with discomfort, pain, redness, or visual impairment.

Ingestion

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Rimsulfuron : Abnormal liver function

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Rimsulfuron	122931-48-0	25 %
Other Ingredients		75 %

SECTION 4. FIRST AID MEASURES

- Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.

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- Ingestion : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- General advice : Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
For medical emergencies involving this product, call toll free 1-800-441-3637.
See Label for Additional Precautions and Directions for Use.

SECTION 5. FIREFIGHTING MEASURES

- Fire and Explosion Hazard : Not a fire or explosion hazard.
- Suitable extinguishing media : Water spray, Dry chemical, Foam, Carbon dioxide (CO₂)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.
(on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Spill Cleanup : Shovel or sweep up. Avoid dust formation. Dispose of in an approved container.
- Accidental Release Measures : Prevent further leakage or spillage. Prevent material from entering sewers,

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waterways, or low areas.
Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Use only with adequate ventilation.
- Personal protective equipment
- Skin and body protection : Applicators and other handlers must wear:
Long sleeved shirt and long pants
Chemical-resistant gloves, Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all greater than or equal to 14 mils
Shoes plus socks
PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
Coveralls
Chemical-resistant gloves, Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all greater than or equal to 14 mils
Shoes plus socks

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Protective measures : Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Exposure Guidelines Exposure Limit Values

Rimsulfuron AEL *	(DUPONT)	5 mg/m3	8 & 12 hr. TWA Total dust.
AEL *	(DUPONT)	2.5 mg/m3	8 & 12 hr. TWA Respirable dust.

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: solid
Color	: off-white, tan
Odor	: none
pH	: 7.0 (1% solution in water)
Density	: 0.62 - 0.68 GJ
Bulk density	: 38.5 - 42.5 lb/ft ³ loose
Water solubility	: dispersible



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SECTION 10. STABILITY AND REACTIVITY

- Stability : Stable under normal conditions.
- Incompatibility : None reasonably foreseeable.
- Hazardous decomposition products : No materials to be especially mentioned.
- Hazardous reactions : Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

- Engarde™ 25 SG Herbicide
- Inhalation 4 h LC50 : > 7.5 mg/l , rat
- Dermal LD50 : > 2,000 mg/kg , rabbit
- Oral LD50 : > 5,000 mg/kg , rat
- Skin irritation : No skin irritation, rabbit
- Eye irritation : Moderate eye irritation, rabbit
- Sensitisation : Animal test did not cause sensitization by skin contact., guinea pig
- Rimsulfuron
- Repeated dose toxicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.
- Oral
rat

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	altered blood chemistry, Liver effects, Organ weight changes
Carcinogenicity	: Did not show carcinogenic effects in animal experiments.
Mutagenicity	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Did not show mutagenic effects in animal experiments.
Reproductive toxicity	: Animal testing did not show any effects on fertility.
Teratogenicity	: Evidence suggests the substance is not a developmental toxin in animals.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

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96 h LC50	: Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l
96 h LC50	: Lepomis macrochirus (Bluegill sunfish) > 1,000 mg/l
72 h EC50	: Pseudokirchneriella subcapitata (green algae) 0.2 mg/l
48 h EC50	: Daphnia magna (Water flea) > 1,000 mg/l

Rimsulfuron

90 d	: NOEC Oncorhynchus mykiss (rainbow trout) 110 mg/l
21 d	: NOEC Daphnia magna (Water flea) 0.82 mg/l

Additional ecological information : Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment

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or disposing of equipment washwaters or rinsate.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal : Container Refilling and Disposal:
Refer to the product label for instructions.
Do not transport if this container is damaged or leaking.

SECTION 14. TRANSPORT INFORMATION

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Rimsulfuron)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Rimsulfuron)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9

Not regulated as a hazardous material by DOT.

Not regulated as a hazardous material by TDG.

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SECTION 15. REGULATORY INFORMATION

PCP Registration # : 31142
Remarks : Regulated under the Pest Control Products Act - WHMIS exempt.

SECTION 16. OTHER INFORMATION

MSDS preparation date : 10/10/2013

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