



**Material Safety Data Sheet**

**RIMFIRE™ MAX HERBICIDE**

MSDS Number: 102000020887

MSDS Version 1.0

Revision Date: 10/09/2009

**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Product Name** RIMFIRE™ MAX HERBICIDE  
**MSDS Number** 102000020887  
**EPA Registration No.** 264-1099

Bayer CropScience  
 2 T.W. Alexander Drive  
 Research Triangle PK, NC 27709  
 USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)  
 For Product Information call: 1-866-99BAYER (1-866-992-2937)

**SECTION 2. HAZARDS IDENTIFICATION**

*NOTE: Please refer to Section 11 for detailed toxicological information.*

**Emergency Overview** Warning! Causes substantial but temporary eye injury. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Avoid contact with skin. Avoid breathing dust.

**Physical State** dry, free flowing, water dispersible granules

**Odor** aromatic

**Appearance** beige

**Routes of Exposure** Eye contact, Skin contact, Inhalation, Ingestion

**Immediate Effects**

**Eye** Causes substantial but temporary eye injury. Severe eye irritation. Do not get in eyes.

**Skin** Harmful if absorbed through skin. May cause slight irritation. Do not get on skin.

**Ingestion** Harmful if swallowed. Do not take internally.

**Inhalation** Harmful if inhaled. Avoid breathing dust.



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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Propoxycarbazone-sodium	181274-15-7	4.76
Mesosulfuron-methyl	208465-21-8	1.91
Mefenpyr-diethyl	135590-91-9	
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	

**SECTION 4. FIRST AID MEASURES**

<b>General</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</b>	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 physician or poison control center immediately.
<b>Skin</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not leave victim unattended.
<b>Inhalation</b>	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
<b>Notes to Physician</b>	
<b>Signs and Symptoms</b>	Irritation
<b>Treatment</b>	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

**SECTION 5. FIRE FIGHTING MEASURES**

<b>Explosiveness</b>	Not explosive. 92/69/EEC, A.14 / OECD 113
<b>Fire and Explosion Hazards</b>	In the event of fire the following may be released: Carbon monoxide (CO) Nitrogen oxides (NOx) Sulphur oxides



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**Suitable Extinguishing Media**      Foam, Dry chemical, Water spray

**Fire Fighting Instructions**      Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**      Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

**Methods for cleaning up**      Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

**Additional Advice**      Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact vegetation.

**SECTION 7. HANDLING AND STORAGE**

**Handling Procedures**      Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Care should be taken to avoid formation of dust from abraded granules.

**Storing Procedures**      Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight.

**Work/Hygienic Procedures**      Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

**Min/Max Storage Temperatures**      Recommended minimum transport/storage temperature: 0 °C / 32 °F  
Recommended maximum transport/storage temperature: 35 °C / 95 °F



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**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>General Protection</b>	Follow all label instructions. Train employees in safe use of the product.
<b>Eye/Face Protection</b>	Chemical resistant goggles must be worn.
<b>Hand protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory Protection</b>	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

**Exposure Limits**

Naphthalene	91-20-3	ACGIH	TWA	10 ppm
		ACGIH	STEL	15 ppm
		NIOSH	REL	10 ppm
		NIOSH	STEL	15 ppm
		OSHA Z1	PEL	10 ppm
		OSHA Z1A	TWA	10 ppm
		OSHA Z1A	STEL	15 ppm
		US CA OEL	TWA PEL	10 ppm
		US CA OEL	STEL	15 ppm
		TX ESL	ST ESL	440 ug/m3
		TX ESL	AN ESL	44 ug/m3
		OES BCS*	TWA	10 ppm
		Silica, amorphe Perlite	7631-86-9 93763-70-3	NIOSH
NIOSH	REL			5 mg/m3
NIOSH	REL			10 mg/m3
TX ESL	ST ESL			50 ug/m3
TX ESL	AN ESL			5 ug/m3
TX ESL	ST ESL			50 ug/m3
TX ESL	AN ESL			5 ug/m3
	TWA			15 mg/m3
Kaolin	1332-58-7	ACGIH	TWA	5 mg/m3
		NIOSH	REL	2 mg/m3
		NIOSH	REL	5 mg/m3
		NIOSH	REL	10 mg/m3
		US CA OEL	TWA PEL	2 mg/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	AN ESL	2 ug/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	AN ESL	2 ug/m3
			TWA	10 mg/m3
Solvent Naphtha (petroleum), heavy	64742-94-5		TWA	5 mg/m3
		TX ESL	ST ESL	460 ppm



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aromatic  
 TX ESL AN ESL 46 ppm

\*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** beige  
**Physical State** dry, free flowing, water dispersible granules  
**Odor** aromatic  
**pH** 7.5 - 9.0 (1 %) at 23 °C  
**Bulk Density** 616 - 724 kg/m3

**SECTION 10. STABILITY AND REACTIVITY**

**Hazardous Reactions** No hazardous reactions when stored and handled according to prescribed instructions.  
**Chemical Stability** Stable under normal conditions.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity studies have been bridged from a similar formulation containing the active ingredients, propoxycarbazone-sodium and mesosulfuron-methyl. The non-acute information pertains to the technical-grade active ingredients.

**Acute Oral Toxicity** rat: LD50: > 2,000 mg/kg  
**Acute Dermal Toxicity** male/female combined rat: LD50: > 2,000 mg/kg



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**Acute Inhalation Toxicity** male/female combined rat: LC50: > 0.995 mg/l  
Exposure time: 4 h  
Determined in the form of a respirable aerosol.  
(actual)  
Highest attainable concentration.  
No deaths

male/female combined rat: LC50: > 3.98 mg/l  
Exposure time: 1 h  
Determined in the form of a respirable aerosol.  
Extrapolated from the 4 hr LC50.  
(actual)

**Skin Irritation** rabbit: Slight irritant effect - does not require labelling.

**Eye Irritation** rabbit: Severe eye irritation.

**Sensitization** guinea pig: Non-sensitizing.

**Chronic Toxicity** Propoxycarbazone-sodium caused kidney and/or adrenal effects in chronic toxicity studies in rats and dogs.

Mesosulfuron-methyl did not cause any treatment-related effects in chronic toxicity studies in rats and dogs.

Mefenpyr-diethyl affected the liver and/or red blood cells in chronic dietary studies in rats and dogs.

### Assessment Carcinogenicity

Propoxycarbazone-sodium and mesosulfuron-methyl do not exhibit carcinogenic potential when tested in rats and mice.

Mefenpyr-diethyl was not carcinogenic in lifetime feeding studies in rats and mice.

#### ACGIH

None.

#### NTP

None.

#### IARC

None.

#### OSHA

None.

### Reproductive toxicity

#### REPRODUCTION

Neither propoxycarbazone-sodium nor mesosulfuron-methyl cause reproductive toxicity in multi-generation studies in rats.

Mefenpyr-diethyl was not a reproductive toxicant at non-maternally toxic dose levels in a two-generation study in rats.



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**DEVELOPMENTAL TOXICITY**

Propoxycarbazone-sodium is not a primary developmental toxicant in rats and rabbits. Developmental effects were observed only at doses that caused maternal toxicity.

Mesosulfuron-methyl is not a developmental toxicant in rats and rabbits.

Mefenpyr-diethyl was not a primary developmental toxicant in rats and rabbits. Developmental effects were observed in rabbits but were considered secondary to maternal toxicity.

**Neurotoxicity**

Propoxycarbazone-sodium is not a neurotoxicant based on acute and subchronic neurotoxicity screening studies in rats.

Mesosulfuron-methyl has no structural relationship to known neurotoxic substances. Moreover, the very low and non-specific toxicological profile of mesosulfuron-methyl shows no evidence of neurotoxic potential.

Mefenpyr-diethyl neurotoxicity studies are not required at this time.

**Mutagenicity**

Neither propoxycarbazone-sodium nor mesosulfuron-methyl is mutagenic or genotoxic based on in vitro and in vivo mutagenicity studies.

Mefenpyr-diethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**SECTION 12. ECOLOGICAL INFORMATION**

**Toxicity to Fish** Rainbow trout (*Oncorhynchus mykiss*)  
LC50: 7.6 mg/l  
Exposure time: 96 h

**Toxicity to Aquatic Plants** *Pseudokirchneriella subcapitata*  
Growth rate  
EC50: 3.88 mg/l  
Exposure time: 72 h

**Acute Toxicity to Aquatic Invertebrates** Water flea (*Daphnia magna*)  
EC50: 8.8 mg/l  
Exposure time: 48 h

**Environmental Precautions** 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 surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not apply when weather conditions favor runoff or drift. Drift or runoff from treated areas may adversely affect non-target plants. Do not allow to get into surface water, drains and ground water.

**Ecological Information** The ecological data refer to a similar formulation.



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**SECTION 13. DISPOSAL CONSIDERATIONS**

- General Disposal Guidance** Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.
- Container Disposal** Do not re-use empty containers. Rinsed packaging may be acceptable for landfill, otherwise incineration will be required in accordance with local regulations.

**SECTION 14. TRANSPORT INFORMATION**

TRANSPORTATION CLASSIFICATION:  
Not regulated for Domestic surface shipment

**SECTION 15. REGULATORY INFORMATION**

**EPA Registration No.** 264-1099

**US Federal Regulations**

**TSCA list**

Solvent Naphtha (petroleum), heavy aromatic 64742-94-5

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

None.

**SARA Title III - Section 302 - Notification and Information**

None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**

None.

**US States Regulatory Reporting**

**CA Prop65**

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

None.

**Canadian Regulations**

**Canadian Domestic Substance List**

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**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**





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None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**International Regulations**

**European Inventory of Existing Commercial Substances (EINECS)**

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**SECTION 16. OTHER INFORMATION**

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NFPA 704 (National Fire Protection Association):

Health - 2      Flammability - 0      Reactivity - 1      Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: New Material Safety Data Sheet.

Revision Date: 10/09/2009

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