



Material Safety Data Sheet

OLYMPUS FLEX HERBICIDE

MSDS Number: 102000011564

MSDS Version 1.0

Revision Date: 07/05/2005

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name OLYMPUS FLEX HERBICIDE
MSDS Number 102000011564
EPA Registration No. 264-833
Product Use For Post-emergence control of certain grasses and broadleaf weeds in fall-sown or winter wheat.

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. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Mesosulfuron-methyl	208465-21-8	4.50
Propoxycarbazone-sodium	181274-15-7	6.75

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Hazard to humans and domestic animals. Cause substantial but temporary eye injury. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes or on clothing. Avoid breathing dust. Avoid contact with skin.

Physical State granular
Odor aromatic
Appearance brown
Routes of Exposure Eye contact, Ingestion, Inhalation
Immediate Effects
Eye Cause substantial but temporary eye injury.

SECTION 4. FIRST AID MEASURES



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General	Have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	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.
Skin	Take off all contaminated clothing immediately. Rinse immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.
Inhalation	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 poison control center or doctor for further treatment advice.
Notes to Physician	
Hazards	May pose an aspiration pneumonia hazard.
Treatment	Treat symptomatically. In the event of a mouthful or more being ingested, the following measures should be considered: If ingested, irrigate the stomach using activated charcoal in addition. Elimination by dialysis (forced alkaline diuresis). Monitoring of: kidney, liver and red blood cell count.

SECTION 5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards	In the event of fire the following can be released: carbon monoxide (CO) nitrogen oxides (NOx) Sulphur oxides hydrogen chloride (HCl) hydrogen cyanide (hydrocyanic acid)
Suitable Extinguishing Media	dry powder, water, foam, carbon dioxide (CO2)
Fire Fighting Instructions	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. In the event of fire, wear self-contained breathing apparatus. Wear full protective suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES



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- Personal Precautions** Use personal protective equipment. Evacuate personnel to safe areas.
- Methods for Cleaning Up** Use mechanical handling equipment. Avoid dust formation. Keep in suitable, closed containers for disposal.
- Additional Advice** Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

- Handling Procedures**
 - Ensure adequate ventilation.
 - Handle and open container in a manner as to prevent spillage.
- Storing Procedures** Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.
- Work/Hygienic Procedures**
 - When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday.
 - Handle in accordance with good industrial hygiene and safety practice.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- General Protection**
 - Avoid contact with skin and eyes.
 - Educate and train employees in safe use of the product. Follow all label instructions. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.
- Engineering Controls** See chapter 7; no measures exceeding those mentioned are necessary.
- Eye/Face Protection** goggles
- Hand Protection** Chemical resistant nitrile rubber gloves
- Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks.
- Respiratory Protection** 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**

Synthetic amorphous silica	112926-00-8	ACGIH	TWA	10 mg/m3
		OSHA Z1A	TWA	6 mg/m3
		NIOSH	REL	6 mg/m3



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		OSHA Z1	PEL	15 mg/m3
		Form of Exposure		Total dust.
		OSHA Z1	PEL	5 mg/m3
		Form of Exposure		Respirable fraction.
		US CA OEL	TWA PEL	5 mg/m3
		Form of Exposure		Respirable fraction.
		US CA OEL	TWA PEL	10 mg/m3
		Form of Exposure		Total dust.
		US CA OEL	TWA PEL	5 mg/m3
		Form of Exposure		Respirable fraction.
		US CA OEL	TWA PEL	10 mg/m3
		Form of Exposure		Total dust.
		US CA OEL	TWA PEL	10 mg/m3
		Form of Exposure		Total dust.
		US CA OEL	TWA PEL	5 mg/m3
		Form of Exposure		Respirable fraction.
Perlite	93763-70-3	ACGIH	TWA	10 mg/m3
		Remarks		The value is for particulate matter containing no asbestos and <1% crystalline silica.
		NIOSH	REL	5 mg/m3
		Form of Exposure		Respirable.
		NIOSH	REL	10 mg/m3
		Form of Exposure		Total
		OSHA Z1A	TWA	5 mg/m3
		Form of Exposure		Respirable fraction.
		OSHA Z1A	TWA	15 mg/m3
		Form of Exposure		Total dust.
		US CA OEL	TWA PEL	5 mg/m3
		Form of Exposure		Respirable fraction.
		US CA OEL	TWA PEL	10 mg/m3
		Form of Exposure		Total dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	brown
Physical State	granular
Odor	aromatic
pH	8.0 - 9.0 at 20 °C
Bulk Density	34.92 lbs/ft ³
Decomposition Temperature	No decomposition if used as directed.



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SECTION 10. STABILITY AND REACTIVITY

Chemical Stability 24 Months
20 - 30 °C

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity rat: LD50: > 2,000 mg/kg

Acute Dermal Toxicity rat: LD50: > 2,000 mg/kg

Acute Inhalation Toxicity rat: LC50: > 1 mg/l
Exposure time: 4 h
The acute inhalational toxicity (LC50) was determined in the form of a respirable aerosol.
Highest attainable concentration.

Skin Irritation rabbit: No skin irritation

Eye Irritation rabbit: Irritating to eyes.

Sensitization guinea pig: Non-sensitizing The value mentioned relates to the active ingredient mesosulfuron-methyl.

Assessment Carcinogenicity

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to Fish Rainbow trout (*Oncorhynchus mykiss*)
LC50: > 100 mg/l
Exposure time: 96 h

Toxicity to Aquatic Plants *Pseudokirchneriella subcapitata*
EC50: 0.18 mg/l
Exposure time: 72 h

Acute Toxicity to Aquatic Invertebrates Water flea (*Daphnia magna*)
EC50: > 100 mg/l
Exposure time: 48 h



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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 apply where runoff is likely to occur. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow sprays to drift onto adjacent desirable plants. Drift or runoff may adversely affect non-target plants.

Ecological Information The ecological data given are those of the active ingredient Mesosulfuron-methyl

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal Follow advice on product label and/or leaflet. Empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION:
Not regulated for shipment by any mode of transportation

FREIGHT CLASSIFICATION:
Compounds, Tree or Weedkilling, N.O.I., other than poison; Having a density of greater than 20 LBS. per cubic foot

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 264-833

US Federal Regulations

- TSCA list**
None.
- 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.



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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
None.

Environmental
CERCLA
None.
Clean Water Section 307 Priority Pollutants
None.
Safe Drinking Water Act Maximum Contaminant Levels
None.

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):
Health - 2 Flammability - 1 Reactivity - 1 Others - none
0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: New MSDS.

Revision Date: 07/05/2005

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