



Material Safety Data Sheet

**OLYMPUS™ 70% WATER DISPERSIBLE GRANULAR
HERBICIDE**

MSDS Number: 102000011542

MSDS Version 2.0

Revision Date: 03/05/2009

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name OLYMPUS™ 70% WATER DISPERSIBLE GRANULAR HERBICIDE
MSDS Number 102000011542
EPA Registration No. 264-809

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>
Propoxycarbazone-sodium	181274-15-7	70.00

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Harmful if swallowed. Avoid contact with skin, eyes and clothing.

Physical State fine granules

Odor weak characteristic

Appearance tan

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

Immediate Effects
Ingestion Harmful if swallowed. Do not take internally.

Chronic or Delayed Long-Term This product or its components may have target organ effects.

SECTION 4. FIRST AID MEASURES

General When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.



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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 physician or poison control center immediately.
Skin	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.
Ingestion	Call a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
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 physician or poison control center immediately.
Notes to Physician Signs and Symptoms	To date no symptoms are known.
Treatment	Treat symptomatically. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Explosiveness	Not explosive. 92/69/EEC, A.14 / OECD 113
Fire and Explosion Hazards	In the event of fire the following may be released: Carbon monoxide (CO) Nitrogen oxides (NOx) Sulphur oxides
Suitable Extinguishing Media	Water spray, Foam, Sand
Fire Fighting Instructions	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses. Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. In the event of fire, wear self-contained breathing apparatus.



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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** Use only in area provided with appropriate exhaust ventilation.

Keep away from heat and sources of ignition. Care should be taken to avoid formation of dust from abraded granules. Dust may form explosive mixtures with air. Take measures to prevent the build up of electrostatic charge.

- Storing Procedures** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Keep away from food, drink and animal feedingstuffs.

- 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 Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. 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: -20 °C / -4 °F
Recommended maximum transport/storage temperature: 40 °C / 104 °F

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- General Protection** Avoid contact with skin and eyes. Do not breathe dust or spray mist.

Follow all label instructions. Train employees in safe use of the product.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash



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PPE separately from other laundry.

Eye/Face Protection	Goggles
Hand protection	Chemical resistant gloves made of waterproof material such as polyethylene or polyvinyl chloride
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

Propoxycarbazone-sodium	181274-15-7	OES BCS*	10 mg/m3
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*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	tan
Physical State	fine granules
Odor	weak characteristic
pH	7.5 - 9.0 (10 %) at 20 °C
Bulk Density	600 - 700 kg/m3 (bulk density tapped) 35.5 - 41.8 lb/ft³
Melting / Freezing Point	from 160 °C / 320 °F
Water solubility	approx. 42 g/l measured at pH 7
Decomposition Temperature	> 175 °C DSC , Heating rate: 3 K/min Exothermic decomposition.

SECTION 10. STABILITY AND REACTIVITY

Conditions to Avoid	Extremes of temperature and direct sunlight.
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Hazardous Reactions No dangerous reaction known under conditions of normal use.
Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the technical-grade active ingredient, propoxycarbazone-sodium.

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

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

Acute Inhalation Toxicity male/female combined rat: LC50: > 4.995 mg/l
Exposure time: 4 h
Determined in the form of dust.
(actual)

male/female combined rat: LC50: > 19.98 mg/l
Exposure time: 1 h
Determined in the form of dust.
Extrapolated from the 4 hr LC50.
(actual)

Skin Irritation rabbit: No skin irritation.

Eye Irritation rabbit: Minimally irritating.

Sensitization guinea pig: Non-sensitizing.

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

Assessment Carcinogenicity

Propoxycarbazone-sodium is not carcinogenic based on oncogenicity studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive & Developmental Toxicity REPRODUCTION: Propoxycarbazone-sodium is not a reproductive toxicant based on a two-generation reproduction study in rats.



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DEVELOPMENTAL TOXICITY: Propoxycarbazone-sodium 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.

Mutagenicity

Propoxycarbazone-sodium is not mutagenic or genotoxic based on in vitro and in vivo mutagenicity studies.

SECTION 12. ECOLOGICAL INFORMATION

**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. Apply this product as specified on the label.

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

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. Follow advice on product label and/or leaflet.

SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated for Domestic Surface Transportation

FREIGHT CLASSIFICATION:

Compounds, Tree or Weedkilling, N.O.I., other than poison, having a density of 20 LBS or greater per cubic foot

SECTION 15. REGULATORY INFORMATION

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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.

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 - 1 Flammability - 1 Reactivity - 0 Others - none

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

Reason to Revise: Updated due to new system and numbering scheme. Updated for general editorial purposes.

Revision Date: 03/05/2009

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