



Material Safety Data Sheet

IGNITE® SN HERBICIDE

MSDS Number: 102000021443

MSDS Version 1.1

Revision Date: 01/17/2012

Print Date: 01/17/2012

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name IGNITE® SN HERBICIDE
MSDS Number 102000021443
Product code (UVP) 79461976
PCP Registration No. 28532
Product Use Herbicide

Bayer CropScience Inc
 #200, 160 Quarry Park Blvd, SE
 Calgary, Alberta T2C 3G3
 Canada

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)
 For Product Information call: 1-888-283-6847

SECTION 2. HAZARDS IDENTIFICATION

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

Emergency Overview Warning! Harmful if swallowed or absorbed through skin. Causes eye irritation. May cause skin irritation. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist.

Physical State liquid

Odor aromatic

Appearance blue to blue green

Exposure routes Skin Absorption, Ingestion, Inhalation, Eye contact

Immediate Effects

Eye Causes eye irritation. Do not get in eyes.

Skin Harmful or fatal if absorbed through the skin. May cause skin irritation. Do not get on skin or clothing.

Ingestion Harmful if swallowed. Do not take internally.

Inhalation Avoid breathing spray mist.

Chronic or Delayed Long-Term

This product or its components may have target organ effects. This product or its components may have long term (chronic) health effects.



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Potential Environmental Effect Toxic to aquatic organisms. This product may cause adverse effects on non-target plants.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Glufosinate ammonium	77182-82-2	13.50
Alkylethersulfate, sodium salt	68891-38-3	58.50
1-Methoxy-2-propanol	107-98-2	10.00

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.

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. 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. 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**

If large amounts are ingested, the following symptoms may occur:
Hyperthermia
Dyspnoea
Bradycardia
Ataxia
Diarrhoea
Convulsions
Liver and kidney injuries may occur.
Respiratory failure

Hazards

Ingestion may cause liver damage. Dangerous amounts can be absorbed through the skin. More severe effects if alcohol is consumed. Risk of bronchopneumonia in case of prolonged exposure. Poisoning affects the central nervous system.



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Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.
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SECTION 5. FIRE FIGHTING MEASURES

Flash point	57 °C / 135 °F The product does not sustain combustion.
Autoignition temperature	455 °C / 851 °F
Lower Flammability Limit	no data available
Upper Flammability Limit	no data available
Suitable extinguishing media	Water spray, Foam, Carbon dioxide (CO ₂), Dry powder
Unsuitable extinguishing media	High volume water jet
Fire Fighting Instructions	Keep out of smoke. Fight fire from upwind position. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. 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	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. 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	Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Handle and open container in a manner as to
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prevent spillage.

Storing Procedures

Keep away from direct sunlight. Protect from freezing.

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.

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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection

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 PPE separately from other laundry.

Eye/Face Protection

Safety glasses, in case of increased risk, also a face shield

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

Glufosinate ammonium	77182-82-2	OES BCS*	TWA	0.9 mg/m3
1-Methoxy-2-propanol	107-98-2	OEL (QUE)	TWA	100 ppm
		OEL (QUE)	STEL	150 ppm
		CAD AB OEL	TWA	100 ppm
		CAD AB OEL	STEL	150 ppm
		CAD BC OEL	TWA	50 ppm
		CAD BC OEL	STEL	75 ppm
		CAD ON OEL	TWAEV	100 ppm
		CAD ON OEL	STEV	150 ppm
		OEL (QUE)	TWA	100 ppm



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OEL (QUE)

STEL

150 ppm

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	blue to blue green
Physical State	liquid
Odor	aromatic
pH	5.4 - 7.4 (10 %) at 23 °C
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.11 g/cm ³ at 20 °C
Evaporation rate	no data available
Boiling Point	ca. 99 °C / 210 °F at 1.013 hPa
Melting / Freezing Point	no data available
Water solubility	at 20 °C: miscible
Minimum Ignition Energy	no data available
Decomposition temperature	> 200 °C
Partition coefficient: n-octanol/water	no data available
Viscosity	no data available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatibility	Strong oxidizing agents Acids Bases
Hazardous	Thermal decomposition

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Decomposition Products	Ammonia
Hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Chemical Stability	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, glufosinate ammonium.

Acute oral toxicity	male rat: LD50: 2,270 mg/kg female rat: LD50: 1,730 mg/kg male/female combined rat: LD50: 2,000 mg/kg
Acute dermal toxicity	male rat: LD50: 537 mg/kg female rat: LD50: 642 mg/kg male/female combined rat: LD50: 593 mg/kg
Acute inhalation toxicity	male rat: LC50: 2.97 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. female rat: LC50: 3.91 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. male rat: LC50: 11.9 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. female rat: LC50: 15.6 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50.
Skin irritation	rabbit: Mild skin irritation.
Eye irritation	rabbit: Corrosive - causes irreversible eye damage.
Sensitisation	guinea pig: Non-sensitizing.
Chronic toxicity	Glufosinate-ammonium caused neurobehavioral effects and/or



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neuropathological changes in animal studies. Glufosinate-ammonium was well tolerated in rats and mice but less well tolerated in the dog in subchronic studies.

Assessment Carcinogenicity

Glufosinate-ammonium was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive toxicity

Implantation loss occurred in a rat multigeneration study with Glufosinate-ammonium. There were no effects on male fertility.

Developmental Toxicity

Glufosinate-ammonium caused developmental toxicity only at doses toxic to the dams. Glufosinate-ammonium caused an increased incidence of post implantation losses.

Mutagenicity

Glufosinate-ammonium was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION

Environmental precautions

Do not allow to get into surface water, drains and ground 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 contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Dispose of contents/container in accordance with local regulation.

Container Disposal

Do not re-use empty containers. Follow advice on product label and/or leaflet.

SECTION 14. TRANSPORT INFORMATION

TDG

UN-Number

2902



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Labels 6.1
Packaging group III
Description of the goods PESTICIDE, LIQUID, TOXIC, N.O.S.
(GLUFOSINATE-AMMONIUM)

49CFR

UN-Number **2902**
Class 6.1
Packaging group III
Description of the goods PESTICIDES, LIQUID, TOXIC, N.O.S.
(GLUFOSINATE-AMMONIUM)

IMDG

UN-Number **2902**
Class 6.1
Packaging group III
Marine pollutant NO
Description of the goods PESTICIDE, LIQUID, TOXIC, N.O.S.
(GLUFOSINATE-AMMONIUM SOLUTION)

IATA

UN-Number **2902**
Class 6.1
Packaging group III
Environm. Hazardous Mark NO
Description of the goods PESTICIDE, LIQUID, TOXIC, N.O.S.
(GLUFOSINATE-AMMONIUM SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15. REGULATORY INFORMATION

PCP Registration No. 28532

US Federal Regulations

TSCA list

Alkylethersulfate, sodium salt 68891-38-3
1-Methoxy-2-propanol 107-98-2

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

1-Methoxy-2-propanol	107-98-2	CA, IL, MN, RI
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Canadian Regulations

Canadian Domestic Substance List

Alkylethersulfate, sodium salt	68891-38-3
1-Methoxy-2-propanol	107-98-2

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Glufosinate ammonium	77182-82-2
1-Methoxy-2-propanol	107-98-2

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 2 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 2 Flammability - 2 Physical Hazard - 1 PPE -

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

Reason for Revision: Reviewed and updated for general editorial purposes.

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

Revision Date: 01/17/2012

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