



Material Safety Data Sheet

EXCEL® SUPER HERBICIDE

MSDS Number: 102000003028

MSDS Version 2.2

Revision Date: 09/13/2011

Print Date: 09/14/2011

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name EXCEL® SUPER HERBICIDE
MSDS Number 102000003028
Product code (UVP) 05944430
PCP Registration No. 22205
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! Causes eye damage. Causes eye irritation. Causes skin irritation. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist.

Physical State liquid

Odor aromatic

Appearance light yellow

Exposure routes Eye contact, Skin contact, Inhalation

Immediate Effects

Eye Causes eye damage. Causes eye irritation. Do not get in eyes.

Skin Causes skin irritation. Avoid contact with skin and clothing.

Ingestion Do not take internally.

Inhalation Avoid breathing spray mist.

Chronic or Delayed Long-Term

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

Potential Environmental Effect

Toxic to fish.



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Fenoxaprop-P-ethyl	71283-80-2	7.97
Naphthalene	91-20-3	8.79

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

SECTION 5. FIRE FIGHTING MEASURES

Flash point	72 °C / 162 °F
Autoignition temperature	no data available
Lower Flammability Limit	no data available
Upper Flammability Limit	no data available
Explosiveness	no data available



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Suitable extinguishing media Water spray, Alcohol-resistant foam, Carbon dioxide (CO2), Dry powder

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 product to contact vegetation. Do not allow to enter soil, waterways or waste water canal.

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. For personal protection see section 8.
- Storing Procedures** 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.
- Work/Hygienic Procedures** Handle in accordance with good industrial hygiene and safety practice. 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. 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.



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Eye/Face Protection	Tightly fitting safety goggles or 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

Fenoxaprop-P-ethyl Naphthalene	71283-80-2	OES BCS*	TWA	2.6 mg/m3
	91-20-3	OEL (QUE)	TWA	10 ppm
		OEL (QUE)	STEL	15 ppm
		CAD AB OEL	TWA	10 ppm
		CAD AB OEL	STEL	15 ppm
		CAD BC OEL	TWA	10 ppm
		CAD BC OEL	STEL	15 ppm
		CAD ON OEL	TWAEV	10 ppm
		CAD ON OEL	STEV	15 ppm
		OES BCS*	TWA	10 ppm
		OEL (QUE)	TWA	10 ppm
		OEL (QUE)	STEL	15 ppm
		CAD SK OEL	8 HR ACL	10 ppm
		CAD SK OEL	15 MIN ACL	15 ppm

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	light yellow
Physical State	liquid
Odor	aromatic
pH	6.9 (5 %)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.01 g/cm ³ at 20 °C
Evaporation rate	no data available



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Boiling Point	no data available
Water solubility	miscible
Minimum Ignition Energy	no data available
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	no data available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	freezing
Incompatibility	Strong oxidizing agents Strong acids Strong bases
Hazardous Decomposition Products	Thermal decomposition can lead to release of: Carbon monoxide Carbon dioxide (CO ₂)
Hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Chemical Stability	Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity studies have been bridged from similar formulations containing a similar percentage of the active ingredient, fenoxaprop-p-ethyl. The non-acute information pertains to the technical-grade active ingredient.

Acute oral toxicity	rat: LD50: 3,355 mg/kg
Acute dermal toxicity	rat: LD50: > 2,000 mg/kg



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Acute inhalation toxicity rat: LC50: > 6.8 mg/l
 Exposure time: 4 h
 Determined in the form of liquid aerosol.

 rat: LC50: > 20 mg/l
 Exposure time: 1 h
 Determined in the form of liquid aerosol.
 Extrapolated from the 4 hr LC50.

Skin irritation rabbit: slight irritation

Eye irritation rabbit: Moderate eye irritation.

Chronic toxicity Fenoxaprop-p-ethyl caused liver and/or adrenal effects in long-term dietary studies in rats, mice and dogs.

Assessment Carcinogenicity

Fenoxaprop-p-ethyl caused liver and adrenal gland tumors at the highest dose tested in mice. However, there was no evidence of carcinogenicity in a combined chronic/carcinogenicity study in rats treated with Fenoxaprop-P-Ethyl.

ACGIH

Naphthalene	91-20-3	Group A4
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NTP

Naphthalene	91-20-3	
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IARC

Naphthalene	91-20-3	Overall evaluation: 2B
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OSHA

None.

Reproductive toxicity REPRODUCTION: Fenoxaprop-p-ethyl was not a reproductive toxicant in a two-generation study in rats.

DEVELOPMENTAL TOXICITY: Fenoxaprop-p-ethyl is not a primary developmental toxicant in rats and rabbits. Developmental effects were observed in both species but were considered secondary to maternal toxicity.

Assessment neurotoxicity Fenoxaprop-p-ethyl neurotoxicity studies are not required at this time.

Mutagenicity Fenoxaprop-p-ethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION



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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 allow to get into surface water, drains and ground water. 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. Apply this product as specified on the label.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Dispose in accordance with all local, state/provincial and federal regulations. Do not contaminate water, food, or feed by disposal. Never place unused product down any indoor or outdoor drain.

Container Disposal

Follow advice on product label and/or leaflet. Triple rinse containers. Add washings to sprayer at time of filling. Consult state and local regulations regarding the proper disposal of container.

SECTION 14. TRANSPORT INFORMATION

TDG

Not dangerous goods / not hazardous material

49CFR

UN-Number **3082**
Class 9
Packaging group III
Marine pollutant Marine pollutant
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (FENOXAPROP-P-ETHYL, NAPHTHALENE)
RQ Reportable Quantity is reached with 1,137 lb of product.

IMDG

UN-Number **3082**
Class 9
Packaging group III
Marine pollutant YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENOXAPROP-P-ETHYL SOLUTION)

IATA

UN-Number **3082**
Class 9
Packaging group III
Environm. Hazardous Mark YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENOXAPROP-P-ETHYL SOLUTION)



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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. 22205

US Federal Regulations

TSCA list

Naphthalene 91-20-3

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

Naphthalene 91-20-3

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Naphthalene 91-20-3 0.1%

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Naphthalene 91-20-3

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

US State Right-To-Know Ingredients

Naphthalene 91-20-3 CA, CT, IL, MN, NJ, RI

Canadian Regulations

Canadian Domestic Substance List

Naphthalene 91-20-3

Environmental

CERCLA

Naphthalene 91-20-3 100 lbs

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Naphthalene 91-20-3



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SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

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

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

Health - 1* Flammability - 1 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. The following sections have been revised: Section 1: Chemical Product and Company Information. Section 2: Hazards Identification. Section 7: Handling and Storage. Section 16: Other Information.

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

Revision Date: 09/13/2011

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