



MSDS Number: 00000001661

Option® Corn Herbicide

MSDS Version: 4.3

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	Option® Corn Herbicide
Chemical Name	Foramsulfuron
Common Name	
MSDS Number	1661
Chemical Family	Sulfonylurea
Chemical Formulation	
EPA Registration No.	264-685
Product Use	A Herbicide for the Control of Annual and Perennial Grass and Broadleaf Weeds in Field Corn. The maximum use rate for this product is 0.08 pounds active per acre per use season.

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>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
Foramsulfuron Technical	173159-57-4	33.9500	36.0500

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Hazard to humans and domestic animals. Harmful if swallowed. Moderate eye irritation. Avoid contact with skin, eyes and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Physical State	Solid fine granules
Odor	Slight Aromatic
Routes of Exposure	Eye contact, Ingestion, Skin contact
Immediate Effects	
Eye	Moderate eye irritation. Avoid contact with the eyes.

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Skin Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin and clothing.

Ingestion Harmful if swallowed.

SECTION 4. FIRST AID MEASURES

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 Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a poison control center or doctor for treatment advice.

Ingestion Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Have person sip a glass of water if able to swallow. Call a poison control center or doctor immediately for treatment advice.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point Not applicable

Fire and Explosion Hazards Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

Suitable Extinguishing Media Alcohol foam, Dry chemical, Water spray, Carbon dioxide (CO₂)

Fire Fighting Instructions Keep unnecessary people away, isolate hazard area and deny entry. Dike area to prevent runoff and contamination of water sources. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Equipment or materials involved in pesticide fires may become contaminated.

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the effects of the spill. Any disposal practice must be in compliance with all Federal, State/provincial, and local laws and regulations.

Land Spill or Leaks Clean-up methods - small spillage

Soak up with inert absorbent material and dispose of as hazardous waste. Do not create a powder cloud by using a brush or compressed air. Do not flush into surface water or sanitary sewer system. Place in an approved chemical waste

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container for disposal. Rinse spill area with small amount of soapy water. Rinse with water.

Clean-up methods - large spillage

To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Stop leak if you can do so without coming into contact with spilled material. Dike far ahead of liquid spill for later disposal. Do not allow material to enter streams, sewers, or other waterways or contact vegetation. Contact Bayer for further assistance if necessary.

SECTION 7. HANDLING AND STORAGE

Handling Procedures Use proper protective equipment to minimize personal exposure (see Section 8).

Storing Procedures Do not contaminate water, food, or feed by storage or disposal. Keep container tightly closed. Avoid cross contamination with other pesticides.

Work/Hygienic Procedures Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

If no such instructions for washables, use detergent and hot water. Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). Keep and wash PPE separately from other laundry.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls When handlers used closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Eye/Face Protection Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

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.

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General Protection Educate and train employees in safe use of the product. Eye wash facility and safety shower should be available. Follow all label instructions. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.

Exposure Limits None Established

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid fine granules

Odor Slight Aromatic

pH 5.3 (1% in distilled water)

Density 0.56 - 0.64 g/mL

Minimum Explosion Conc. (MEC) 90g/cm³

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability 24 Months
Stable under recommended storage conditions.
25 °C

Hazardous Polymerization (Conditions to Avoid) Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity Rat: LD50: 3,881 mg/kg

Acute Dermal Toxicity Rat: LD50: > 5,000 mg/kg

Acute Inhalation Toxicity Rat: LC50: > 5.32 mg/l
Determined on milled granules.

Skin Irritation Rabbit: moderately irritant

Eye Irritation Rabbit: Mildly irritating.

Sensitization Guinea pig: sensitizing

Chronic Toxicity The following data is based on Foramsulfuron.
The oncogenic potential of foramsulfuron was examined in bioassays with rats and mice with dietary exposure periods of 2 years and 18 months, respectively.

In rats, dietary administration of up to 20,000 ppm of foramsulfuron for 2 years, equivalent to achieved intakes of 849 and 1,135 mg/kg/day for males and females, respectively, did not yield any evidence of toxicity or oncogenicity. The

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mean daily intakes over the 1-year period were 976 and 1,305 mg/kg/day for males and females, respectively. Thus this dose level approximated to the international regulatory limit dose of 1,000 mg/kg/day.

Similarly in mice, no oncogenic activity was found after dietary treatment with up to 8,000 ppm (equating to 1,115 and 1,358 mg/kg/day in males and females, respectively) for 18 months, which was slightly in excess of the international limit dose.

Assessment Carcinogenicity

ACGIH

None

NTP

None

IARC

None

OSHA

None

Reproductive & Developmental Toxicity

Developmental Toxicity

In a rat developmental study, no maternal or developmental effects were considered to have been related to test article administration at any of the doses tested (NOAEL = 1,000 mg/kg/day)

In a rabbit developmental study, no maternal or developmental effects were considered to have been related to test article administration at any of the doses tested (NOAEL = 500 mg/kg/day for maternal and developmental toxicity).

Reproductive Toxicity

There were no apparent effects on any parental or offspring parameters which appeared to have been the result of test article administration. The systemic, reproduction and offspring NOAELs for both generations were the Highest Dose Tested (mg/kg/day = 1,082 and 1,349 for P and F1 males; 1,229 and 1,434 for P and F1 females).

Neurotoxicity

The following is based on Foramsulfuron.

Foramsulfuron is a sulfonylurea herbicide which has no structural relationship to neurotoxic substances. Moreover, its very low and non-specific toxicological profile shows no evidence of neurotoxic potential. Consequently no special studies have been conducted for this.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to Aquatic Plants

Toxicity to other organisms

Acute Exposure

The value mentioned relates to the active ingredient.

Bobwhite quail

LD50: > 2,000 mg/kg

Acute Exposure

The value mentioned relates to the active ingredient.

Mallard duck

LD50: > 2,000 mg/kg

Short Term Exposure Limit (STEL):

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The value mentioned relates to the active ingredient.
Bobwhite quail
LC50: > 5,000 ppm

Short Term Exposure Limit (STEL):
The value mentioned relates to the active ingredient.
Mallard duck
LC50: > 5,000 ppm

Long Term Exposure/Reproduction
The value mentioned relates to the active ingredient.
Bobwhite quail
NOEC: 1,000 ppm

Long Term Exposure/Reproduction
The value mentioned relates to the active ingredient.
Mallard duck
NOEC: 1,000 ppm

Environmental Precautions

Do not allow this product to drift on to non-target areas. 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.

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

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.

RCRA Classification

Not Regulated under this Statute

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

EPA Registration No. 264-685

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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

International Regulations

EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

None

SECTION 16. OTHER INFORMATION

NFPA 704: (National Fire Protection Association)

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

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

Reason for Issue: Update Sections 1-10 with the new format changes. Update Section 14 with changes in transportation.

Approval Date: 10/13/2004

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