



Equip Corn Herbicide

MSDS Version: 1.1

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	Equip Corn Herbicide
Chemical Name	
Common Name	Foramsulfuron + Iodosulfuron-Methyl-Sodium
MSDS Number	2069
Chemical Family	Sulfonylurea
Chemical Formulation	
EPA Registration No.	264-686
Product Use	A herbicide for the control of annual and perennial grass and broadleaf weeds in field corn. The label rate is 0.094 lbs per acre.

Bayer CropScience
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 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	29.5000	30.5000
Iodosulfuron-Methyl-Sodium Technical	144550-36-7	1.9400	2.1000

SECTION 3. HAZARDS IDENTIFICATION

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

<u>Emergency Overview</u>	Caution! Harmful if swallowed. Causes eye irritation. Avoid contact with skin, eyes and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Physical State	Granular
Odor	Slight Aromatic
Appearance	brownish yellow
Routes of Exposure	Ingestion, Eye contact, Skin contact
Immediate Effects	
Eye	Moderate eye irritation. Avoid contact with the eyes.

Material Safety Data Sheet

MSDS Number: 000000002069

Equip Corn Herbicide

MSDS Version 1.1

Skin	Avoid contact with skin, eyes and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Ingestion	Harmful if swallowed.
Inhalation	None known.

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.

Notes to Physician

Treatment	Treat symptomatically.
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SECTION 5. FIRE FIGHTING MEASURES

Flash Point	Not applicable
Fire and Explosion Hazards	Dust may form explosive mixture in air.
Suitable Extinguishing Media	Alcohol foam, Carbon dioxide (CO ₂), Dry chemical, Water spray
Fire Fighting Instructions	Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. Firefighters should wear NIOSH/MSHA 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. Dispose of in accordance with local regulations.
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Material Safety Data Sheet

MSDS Number: 00000002069

Equip Corn Herbicide

MSDS Version 1.1

Land Spill or Leaks Sweep up, keeping dust to a minimum, and place in an approved chemical container. Rinse spill area with small amount of soapy water. Collect washings for disposal. Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

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 closed when not in use. Avoid cross contamination with other pesticides.

Work/Hygienic Procedures Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Shower and change into street clothes before leaving the work site.

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 Chemical resistant goggles must be worn.

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.

General Protection 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

Appearance brownish yellow

Physical State Granular

Odor Slight Aromatic

pH 6.7 (1% in distilled water)

Bulk Density 0.53 - 0.63 g/ml

SECTION 10. STABILITY AND REACTIVITY

Material Safety Data Sheet

MSDS Number: 000000002069

Equip Corn Herbicide

MSDS Version 1.1

Chemical Stability Stable

Hazardous Polymerization (Conditions to Avoid) Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the active ingredients, foramsulfuron technical and iodosulfuron-methyl-sodium technical.

Acute Oral Toxicity Male Rat: LD50: 4,756 mg/kg

Female Rat: LD50: 3,479 mg/kg

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

Acute Inhalation Toxicity Male/Female Rat: LC50: 4-hr exposure to dust: > 4.69 mg/l (actual)

Male/Female Rat: 1-hr exposure to dust (extrapolated from 4-hr LC50): > 18.76 mg/l (actual)

Skin Irritation Rabbit: slight irritation

Eye Irritation Rabbit: Mild irritant.

Sensitization Guinea pig: Skin sensitizer.

Subchronic Toxicity Foramsulfuron was non-toxic at doses up to and exceeding 1000 mg/kg/day in subchronic dietary studies in rats, mice and dogs.

In subchronic toxicity studies, iodosulfuron-methyl-sodium caused decreased body weights and liver effects in high-dosed rats and mice, and hematotoxic findings in high-dosed dogs.

Chronic Toxicity Foramsulfuron was non-toxic at doses of ~1000 mg/kg/day in chronic dietary studies in rats, mice and dogs.

Long-term exposure to iodosulfuron-methyl-sodium caused body weight changes in rats and minimal moderate hematopoietic hyperplasia and increased cholesterol in dogs.

Assessment Carcinogenicity

Foramsulfuron and iodosulfuron-methyl-sodium were not carcinogenic in oncogenicity studies in rats and mice.

ACGIH

None

NTP

None

IARC

None

Material Safety Data Sheet

MSDS Number: 000000002069

MSDS Version 1.1

Equip Corn Herbicide

OSHA
None

Reproductive & Developmental Toxicity

REPRODUCTION: Foramsulfuron was not a reproductive toxicant in a two-generation study in rats.

Iodosulfuron-methyl-sodium caused a decrease in pup body weights and a slight increase in perinatal mortality in conjunction with maternal toxicity at the high dose in a multigeneration study in rats.

DEVELOPMENTAL TOXICITY: Foramsulfuron was not a developmental toxicant in developmental toxicity studies in rats and rabbits.

Iodosulfuron-methyl-sodium produced slight developmental effects in conjunction with maternal toxicity at the limit dose (1000 mg/kg) in rats. No evidence of a teratogenic effect was identified. There was no evidence of an embryotoxic, developmental or teratogenic potential for iodosulfuron-methyl-sodium in a developmental toxicity study in rabbits.

Neurotoxicity

Specific neurotoxicity screening studies have not been conducted on foramsulfuron.

No evidence for delayed neurotoxicity or other neurotoxic effects were seen after administration of iodosulfuron-methyl-sodium at maximum tolerated doses in long-term studies in rats, mice and dogs. In addition, iodosulfuron-methyl-sodium has no structural relationship to known neurotoxic substances, therefore, no special neurotoxicity studies have been conducted on this active ingredient.

Mutagenicity

The overall weight of evidence indicates foramsulfuron does not possess significant genotoxicity activity.

Numerous in vitro and in vivo mutagenicity studies have demonstrated that iodosulfuron-methyl-sodium is not genotoxic or mutagenic.

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 allow this product to drift on to non-target areas. 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

Do not contaminate water, food, or feed by storage or disposal. Follow container label instructions for disposal of wastes generated during use in compliance with the product label.

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

Material Safety Data Sheet

MSDS Number: 000000002069

Equip Corn Herbicide

MSDS Version 1.1

SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not Regulated for domestic Surface Transportation

FREIGHT CLASSIFICATION::

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

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 264-686

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

Material Safety Data Sheet

MSDS Number: 000000002069

Equip Corn Herbicide

MSDS Version 1.1

SECTION 16. OTHER INFORMATION

NFPA	Health	Flammability	Reactivity	Others
	1	1	0	None

REASON FOR REVISION: Revised the following sections: Section 1 - Add common name and chemical family name; Section 9 - Revise pH; Add bulk density; Section 11 - Revise toxicological information; Section 15 - Update TSCA list; Section 16 - Revise NFPA code.

Approval Date: 09/02/2004

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