



SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

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| Product Name | Option 2.25 SC |
| Chemical Name | Foramsulfuron |
| Common Name | |
| MSDS Number | 2255 |
| Chemical Family | Sulfonylurea |
| Chemical Formulation | |
| PCP Registration No. | 27424 |
| Product Use | Option 2.25 SC is a post-emergent herbicide which controls a broad spectrum of grassy and broadleaf weeds in field corn in eastern Canada utilizing conventional tillage systems. |

Bayer CropScience
 #100 - 3131 - 114th Avenue SE
 Calgary, AB T2Z 3X2
 Canada

Emergency Number (24 Hours/Day): 1-800-334-7577 Product Information: 1-888-283-6847

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 | >= 2.3000 | <= 2.4000 |
| Solvent naphtha, petroleum, heavy arom. | 64742-94-5 | >= 30.0000 | <= 33.0000 |

SECTION 3. HAZARDS IDENTIFICATION

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

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| <u>Emergency Overview</u> | Caution! Hazard to humans and domestic animals. Keep out of the reach of children. |
| Physical State | Liquid |
| Odor | Aromatic |
| Appearance | light yellow to brownish |
| Immediate Effects | |
| Eye | Moderate eye irritation. Avoid contact with the eyes. |
| Skin | Avoid contact with skin, eyes and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. |

SECTION 4. FIRST AID MEASURES

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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 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

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| Flash Point | > 100 °C / > 212 °F |
| Explosiveness | The product is not explosive. |
| Suitable Extinguishing Media | Alcohol foam, Dry chemical, Water spray, Carbon dioxide (CO ₂) |
| Fire Fighting Instructions | <p>Keep unnecessary people away, isolate hazard area and deny entry. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation. Keep out of low areas. Stay upwind if possible.</p> <p>Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.</p> |

SECTION 6. ACCIDENTAL RELEASE MEASURES

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| 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 | <p>Do not flush into surface water or sanitary sewer system. Do not create a powder cloud by using a brush or compressed air. Soak up with inert absorbent material and dispose of as hazardous waste. Clean-up methods - small spillage Place in an approved chemical waste container for disposal. Rinse spill area with small amount of soapy water. Rinse away with water</p> <p>Remove all sources of ignition. 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. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs. Contact Bayer for further assistance if</p> |

Material Safety Data Sheet

MSDS Number: 000000002255
MSDS Version 1.1

Option 2.25 SC

necessary.

SECTION 7. HANDLING AND STORAGE

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| Storing Procedures | Do not contaminate water, food, or feed by storage or disposal. |
| Work/Hygienic Procedures | <p>Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.</p> <p>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.</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.</p> <p>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.</p> <p>For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.</p> |
| Min/Max Storage Temperatures | <p>Do not transport or store below 0 °C / 32 °F</p> <p>Do not transport or store above 30 °C / 86 °F</p> <p>Do not handle above 50 degrees Celcius.</p> |

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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| Engineering Controls | Ensure adequate ventilation. Provide appropriate exhaust ventilation at places where dust is formed. Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Use only with adequate ventilation/personal protection. Do not use in areas without adequate ventilation. Control airborne concentrations below the exposure guidelines. Use local exhaust at all process locations to control employee exposure. Thoroughly ventilate all transport vehicles prior to unloading. |
| Eye/Face Protection | Splash goggles Protective eyewear. or Safety glasses / face shield |
| Hand Protection | Chemical-resistant gloves (barrier laminate such as Silver Shield, butyl rubber, nitrile rubber or Viton) |
| Body Protection | Applicators and other handlers must wear: Long-sleeved shirt and long pants. Shoes plus socks. Chemical resistant gloves made of waterproof material such as polyethylene or polyvinyl chloride. |
| 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 | |

Material Safety Data Sheet

MSDS Number: 00000002255

Option 2.25 SC

MSDS Version 1.1

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------|-----------------------------|
| Appearance | light yellow to brownish |
| Physical State | Liquid |
| Odor | Aromatic |
| pH | 5.2 (1% in distilled water) |
| Density | 0.9652 g/cu-cm at 20°C |
| Water Solubility | Dispersible |

SECTION 10. STABILITY AND REACTIVITY

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| Chemical Stability | Stable under recommended storage conditions. |
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SECTION 11. TOXICOLOGICAL INFORMATION

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| Acute Oral Toxicity | Rat: LD50: < 2,000 mg/kg |
| Acute Dermal Toxicity | Rat: LD50: > 5,000 mg/kg |
| Acute Inhalation Toxicity | Rat: LC50: > 5.25 mg/l Exposure time: Determined on milled granules. |
| Skin Irritation | Rabbit: Moderate skin irritation |
| Eye Irritation | Rabbit: Mild eye irritation |
| Sensitization | Guinea pig: non-sensitizing Potential skin snesitizer. |
| Chronic Toxicity | <p>The following data is based on Foramsulfuron.</p> <p>The oncogenic potential of foramsulfuron was examined in bioassays with rats and mice with dietary exposure periods of 2 years and 18 months, respectively.</p> <p>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 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.</p> <p>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.</p> |

Assessment Carcinogenicity

ACGIH
None
NTP

Material Safety Data Sheet

MSDS Number: 00000002255
MSDS Version 1.1

Option 2.25 SC

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):
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

Material Safety Data Sheet

MSDS Number: 00000002255
MSDS Version 1.1

Option 2.25 SC

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

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 apply when weather conditions favor runoff or drift. Do not drain or rinse equipment near desirable vegetation. 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

TDG 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

PCP Registration No. 27424

US Federal Regulations

TSCA list

Solvent naphtha, petroleum, heavy arom. 64742-94-5

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.

Material Safety Data Sheet

MSDS Number: 000000002255
MSDS Version 1.1

Option 2.25 SC

US State right-to-know ingredients

None

Canadian Regulations

Canadian Domestic Substance List

Solvent naphtha, petroleum, heavy arom. 64742-94-5

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)

Solvent naphtha, petroleum, heavy arom. 64742-94-5

SECTION 16. OTHER INFORMATION

NFPA 704: (National Fire Protection Association)

Health - 2 Flammability - 1 Reactivity - 0 Others -

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

This MSDS was prepared by Bayer CropScience Inc and Bayer CropScience AG QHSE Departments. 1-(306)-721-0310

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