



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Diacon IGR Plus**

Synonyms

- 100527167; EPA Reg. No.: 89459-86; RF2226 DM Combo Grain EC

Product Description

- Clear pale yellow to amber liquid.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

- Insecticide. Insect growth regulator.

Restrictions on use

- **KEEP OUT OF THE REACH OF CHILDREN.** Avoid contact with eyes and skin. Do not inhale. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer

- Central Garden & Pet Company
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States

www.bugfreegrains.com

Emergency telephone number

Manufacturer

- 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

Manufacturer

- 1-800-424-9300 - CHEMTREC

Manufacturer

- 1-800-248-7763

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Acute Toxicity Inhalation 4
Skin Irritation 2
Eye Irritation 2A
Acute Toxicity Oral 3
Skin Sensitization 1

Label elements

OSHA HCS 2012

DANGER



- Hazard statements**
- Harmful if inhaled
 - Toxic if swallowed
 - Causes skin irritation
 - May cause an allergic skin reaction
 - Causes serious eye irritation

Precautionary statements

- Prevention**
- Avoid breathing dust, fume, gas, mist, vapors and/or spray.
 - Use only outdoors or in a well-ventilated area.
 - Wash thoroughly after handling.
 - Do not eat, drink or smoke when using this product.
 - Wear protective gloves/protective clothing/eye protection/face protection.
 - Contaminated work clothing should not be allowed out of the workplace.
- Response**
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
 - Get medical advice/attention if you feel unwell.
 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - Rinse mouth.
 - IF ON SKIN: Wash with plenty of soap and water.
 - If skin irritation occurs: Get medical advice/attention.
 - Take off contaminated clothing and wash before reuse.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - If eye irritation persists: Get medical advice/attention.
- Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
 - Store locked up.

Other hazards

OSHA HCS 2012

- This product is extremely toxic to aquatic organisms, including fish and invertebrates. This product is highly toxic to bees exposed to direct treatment. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

| Composition | | |
|---|----------------|------------------|
| Chemical Name | Identifiers | % |
| Deltamethrin | CAS:52918-63-5 | 4.75% |
| (s)-Methoprene | CAS:65733-16-6 | 11.4% |
| Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts | CAS:68584-23-6 | 14.05% TO 17.89% |
| 2-Ethylhexanol | CAS:104-76-7 | 8.94% TO 11.5% |
| Other ingredients | NDA | Balance |

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation**
 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor if you feel unwell.
- Skin**
 - IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Eye**
 - IF IN EYES: Hold eye open and rinse 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.
- Ingestion**
 - IF SWALLOWED: Immediately call a poison control center or physician for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless instructed to do so by poison control or physician. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

- Toxic if swallowed. Harmful if inhaled. May cause an allergic skin reaction. Causes skin irritation. Causes serious eye irritation. General neurological symptoms were exhibited in studies with rats, mice and dogs. These symptoms included unsteadiness, abnormal gait, tremors and liquid feces. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- SMALL FIRES: Dry chemical, CO₂, water spray or alcohol-resistant foam.

- Unsuitable Extinguishing Media**
- Avoid heavy hose streams.

- Firefighting Procedures**
- Keep unauthorized personnel away.
Stay upwind.
Ventilate closed spaces before entering.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Do not use water-based sprays in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

- Hazardous Combustion Products**
- Thermal degradation may produce oxides of carbon, oxides of nitrogen and/or volatile hydrocarbon vapors.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Use appropriate Personal Protective Equipment (PPE). Ventilate enclosed areas. Do not walk through spilled material.

Emergency Procedures

- Do not allow runoff into water, storm drains or drainage ditches. Stay upwind. Wear appropriate personal protective equipment (PPE). Keep unauthorized personnel away.

Environmental precautions

- Do not allow runoff into water, storm drains or drainage ditches.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Absorb with earth, sand or other non-combustible material and transfer to containers. Use appropriate Personal Protective Equipment (PPE).

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Avoid contact with skin, eyes, and clothing. Keep away from heat, sparks, and flame. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing fumes. Read label before use. Wash hands thoroughly with soap and water after handling. Do not take internally.

Conditions for safe storage, including any incompatibilities

Storage

- Avoid extreme temperatures. Store in a tightly closed container. Store in a well ventilated place. Store in cool, dry area, inaccessible to children. Store in original container. Store locked up. Ventilate enclosed areas.

Incompatible Materials or Ignition Sources

- Strong acids, strong bases, and oxidizing agents. Do not use water-based sprays in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure controls

Engineering Measures/Controls

- Use adequate ventilation to remove vapors (fumes, dust etc.)

Personal Protective Equipment**Pictograms****Respiratory**

- If handling without sufficient ventilation, wear a NIOSH approved respirator.

Eye/Face

- Wear chemical splash safety goggles.

Hands

- Wear chemical resistant gloves.

Skin/Body

- It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Section 9 - Physical and Chemical Properties**Information on Physical and Chemical Properties**

| Material Description | | | |
|-------------------------------------|--------------------------------|----------------------------|------------------------------------|
| Physical Form | Liquid | Appearance/Description | Clear pale yellow to amber liquid. |
| Color | Pale yellow to amber. | Odor | Moderate unpleasant, paint-like. |
| Odor Threshold | No data available | | |
| General Properties | | | |
| Boiling Point | No data available | MeltingPoint/FreezingPoint | No data available |
| Decomposition Temperature | No data available | pH | 6.4 @ 25°C |
| Specific Gravity/Relative Density | 1.04 g/ml @ 20°C (8.68 lb/gal) | Water Solubility | No data available |
| Viscosity | 50 cPs | Explosive Properties | No data available |
| Volatility | | | |
| Vapor Pressure | No data available | Vapor Density | No data available |
| Evaporation Rate | No data available | | |
| Flammability | | | |
| FlashPoint | 97.5 °C(207.5 °F) | UEL | No data available |
| LEL | No data available | Autoignition | No data available |
| Flammability (solid, gas) | No data available | | |
| Environmental | | | |
| Octanol/Water Partition coefficient | No data available | | |

Section 10: Stability and Reactivity**Reactivity**

- Non-reactive under normal handling and storage conditions.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid Incompatible materials

- Keep away from fire. Direct sunlight. Extreme temperatures.
- Strong acids, strong bases and oxidizing agents.

Hazardous decomposition products

- Decomposes upon heating to produce toxic gases which may include: oxides of carbon, oxides of nitrogen and/or volatile hydrocarbon vapors.

Section 11 - Toxicological Information

Information on toxicological effects

| | CAS | |
|-----------------|-----|--|
| Diacon IGR Plus | NDA | Acute Toxicity: Ingestion/Oral-Rat LD50 • 175 mg/kg; Inhalation-Rat LC50 • >2.1 mg/L 4 Hour(s); Skin-Rabbit LD50 • >5000 mg/kg; Irritation: Eye-Rabbit • Severe irritation; Skin-Rabbit • Moderate irritation |

| GHS Properties | Classification |
|-------------------------------|---|
| Acute toxicity | OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation 4; Acute Toxicity - Oral 3 |
| Skin corrosion/Irritation | OSHA HCS 2012 • Skin Irritation 2 |
| Serious eye damage/Irritation | OSHA HCS 2012 • Eye Irritation 2A |
| Skin sensitization | OSHA HCS 2012 • Skin Sensitizer 1 |
| Respiratory sensitization | OSHA HCS 2012 • Classification criteria not met |
| Aspiration Hazard | OSHA HCS 2012 • Classification criteria not met |
| Carcinogenicity | OSHA HCS 2012 • Classification criteria not met |
| Germ Cell Mutagenicity | OSHA HCS 2012 • Classification criteria not met |
| Toxicity for Reproduction | OSHA HCS 2012 • Classification criteria not met |
| STOT-SE | OSHA HCS 2012 • Classification criteria not met |
| STOT-RE | OSHA HCS 2012 • Classification criteria not met |

Route(s) of entry/exposure • Inhalation, Skin, Eye, Ingestion.

Potential Health Effects

Inhalation

- Acute (Immediate)** • Harmful if inhaled.
- Chronic (Delayed)** • No data available.

Skin

- Acute (Immediate)** • May be harmful if absorbed through skin. May cause a transient, localized parasthesia, characterized by tingling, burning or numbness sensation in some individuals. Causes skin irritation.

- Chronic (Delayed)**
 - No data available
- Eye**
- Acute (Immediate)**
 - Causes serious eye irritation.
- Chronic (Delayed)**
 - No data available
- Ingestion**
- Acute (Immediate)**
 - Toxic if ingested.
- Chronic (Delayed)**
 - No data available
- Mutagenic Effects**
 - Deltramethrin has been tested and found negative for mutagenicity potential. (s)-Methoprene has been tested and found negative for mutagenicity potential.
- Carcinogenic Effects**
 - Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice. (s)-Methoprene is not classified as carcinogen by NTP, IARC and OSHA. No other components present at 0.1% or greater are listed by IARC, OSHA or NTP.
- Reproductive Effects**
 - Deltamethrin does not cause birth defects or adverse effects on reproduction. (s)-Methoprene is not a reproductive toxin.

Section 12 - Ecological Information

Toxicity

| Components | | |
|------------------------|------------|---|
| Deltamethrin (4.75%) | 52918-63-5 | Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Poecilia reticulata</i> 0.00174 mg/L [Acute] Aquatic Toxicity - Crustacea: 24 hour EC50 <i>Daphnia magna</i> 0.00415 mg/L [Acute] |
| (s)-Methoprene (11.4%) | 65733-16-6 | Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow Trout</i> 0.76 mg/L [Acute] 96 Hour(s) LC50 <i>Blue Gill</i> >0.37 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.048 mg/L [Chronic] Aquatic Toxicity-Crustacea: NOEC <i>Mysid shrimp</i> 0.014 mg/L [Chronic] 96 Hour(s) LC50 <i>Mysid shrimp</i> 0.11 mg/L [Acute] 48 Hour(s) LC50 <i>Daphnia magna</i> 0.36 mg/L [Acute] |

Persistence and degradability

- Deltamethrin: Hydrolytic Half-Life: 2.28-2.70 days @ pH 9.0 Photolytic Half-Life: 64-86 days (water); 9 days (soil) Soil Half-Life: 14-40 days (cropped plots); 37-69 days (bare ground) in field dissipation studies.

Bioaccumulative potential

- No data available

Mobility in Soil

- The major routes of dissipation are soil binding and soil microbial degradation. Although soil binding is strong, it is not immediate. It appears that spray drift is the only significant route of exposure to aquatic organism. However, deltamethrin's strong binding capacity to slime, plants, sediment, etc., might rapidly prevent the availability of deltamethrin for bioconcentration in aquatic systems. Additionally, its insolubility in water will be a factor in limiting its bioconcentration as well. Deltamethrin hydrolyzes under alkaline conditions. Leaching studies indicate that Deltamethrin is immobile.

Other adverse effects

Potential Environmental Effects

- This product is extremely toxic to fresh water and estuarine fish and invertebrates. This product is highly toxic to bees exposed to direct treatment.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

Section 14 - Transport Information

| | UN number | UN proper shipping name | Transport hazard class(es) | Packing group | Environmental hazards |
|-----------|-----------|---|----------------------------|---------------|------------------------|
| DOT | UN3352 | Pyrethroid pesticide, liquid toxic (Deltamethrin) | 6.1 | III | Not Applicable |
| IMO/IMDG | UN3352 | Pyrethroid pesticide, liquid toxic (Deltamethrin) | 6.1 | III | Marine Pollutant |
| IATA/ICAO | UN3352 | Pyrethroid pesticide, liquid toxic (Deltamethrin) | 6.1 | III | Acute Aquatic Toxicity |

Special precautions for user • No data available

IMO/IMDG • No data available

IATA/ICAO • No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute

FIFRA – Pesticide Labeling

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

WARNING

Precautionary Statements • KEEP OUT OF REACH OF CHILDREN.

Hazards to Humans and Domestic Animals

May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

First Aid

If swallowed• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything to an unconscious person. If in eyes• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes. • Call a poison control center or doctor for treatment advice. If on skin• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

Environmental Hazards •

This product is extremely toxic to fresh water and estuarine fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. This pesticide is highly toxic to bees exposed to direct treatment. Do not apply or allow it to drift to crops or weeds on which bees are actively foraging.

Physical or Chemical Hazards •

Do not use water-based sprays of RF2226 DM Combo in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

| Inventory | | |
|---|------------|------|
| Component | CAS | TSCA |
| (s)-Methoprene | 65733-16-6 | No |
| 2-Ethylhexanol | 104-76-7 | Yes |
| Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts | 68584-23-6 | Yes |
| Deltamethrin | 52918-63-5 | No |

Section 16 - Other Information

Revision Statement: Revised Section 14 – shipping description.

Revision Date • 10/March/2017

Last Revision Date • 09/November/2016

Preparation Date • 09/November/2016

Disclaimer/Statement of Liability •

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