



Safety Data Sheet

Report Date 19-Dec-19

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1. Identification

Product Name : CENTRUS
Synonyms : None
Product Use : Indaziflam+Rimsulfuron Herbicide
Manufacturer/Supplier : Helena Agri-Enterprises, LLC
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Danger
Skin Irritation : Not classified as hazardous under 29 CFR 1910.1200 (2012)
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : LD50 (female rat) = 1,098 mg/kg
Acute Toxicity Dermal : Not classified as hazardous under 29 CFR 1910.1200 (2012)
Hazard Categories : Oral/Inhalation Toxicity-4/4; Eye Irritation-2B; STOT,Repeated-2; Carcinogenicity-1B
Hazard Statement : Harmful if swallowed
Harmful if inhaled
Causes eye irritation
May cause damage to organs through prolonged or repeated exposure
May cause cancer

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Indaziflam	950782-86-2	24.30
Rimsulfuron	122931-48-0	16.67
Inert ingredients, totaling		59.03
includes:		
Crystalline quartz (respirable)	14808-60-7	0.24%
Sodium diisopropylnaphtalene sulphonate	1322-93-6	5.00%
Sulfonated aromatic polymer, sodium salt	68425-94-5	9.00%



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4. First Aid Measures

- Eye** : Hold eye open and rinse slowly and gently with water for 15 to 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.
- 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.
- 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.
- Indication of Immediate Medical Attention and Special Treatment Needed** : Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

5. Fire Fighting Measures

- Extinguishing Media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do NOT use high volume water jet.
- Specific Hazards Arising from the Chemical** : Dangerous gases are evolved in the event of a fire. Do not allow run-off from fire fighting to enter drains or water courses.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Do not breathe fumes in the event of fire and/or explosion. Keep out of smoke. Fight fire from upwind position. Contain the spread of fire fighting media.

6. Accidental Release Measures

- Personal Precautions** : Avoid dust formation. Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
- Protective Equipment** : Tight-fitting safety goggles, chemical-resistant nitrile gloves, long-sleeved shirt, long pants, shoes plus socks. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Do not allow product to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.
- Methods and Materials for Containment and Cleanup** : Sweep up or vacuum spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

7. Handling and Storage



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- Precautions for Safe Handling** : Use only in area provided with appropriate exhaust ventilation. Avoid dust formation. Handle and open container in a manner as to prevent spillage. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
- Conditions for Safe Storage** : 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 and out of the reach of children, preferably in a locked storage area, Keep away from direct sunlight. Keep away from food, drink and animal feedingstuffs.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV/PEL for indaziflam or rimsulfuron. Crystalline quartz (respirable): TLV=0.025 mg/m³, PEL=0.05 mg/m³.
- Appropriate Engineering Controls** : Provide local exhaust ventilation.
- Personal Protective Equipment** : Tight-fitting safety goggles, chemical-resistant nitrile gloves, long-sleeved shirt, long pants, shoes plus socks. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

- Odor/Appearance** : Beige water dispersible granules/characteristic.
- Flash Point, °F** : Not applicable
- Boiling Point, °F** : Not applicable
- Melting Point(Freezing point), °C** : Not applicable
- Vapor Pressure, mm Hg @ 20 °C** : No data available
- Vapor Density** : No data available
- Solubility in Water** : Dispersible
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 0.50 g/mL (loose)
- Evaporation Rate(Butyl Acetate = 1)** : Not applicable
- Octanol/Water Partition Coefficient** : Not applicable
- pH** : 4.8 to 6.8 (10%)
- Flammable Limits (approximate volume % in air)** : No data available
- Auto-ignition Temperature** : No data available
- Decomposition temperature** : No data available

10. Stability and Reactivity

- Reactivity** : Not reactive
- Chemical Stability** : Stable



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Hazardous Decomposition Products : No decomposition products expected under normal conditions of use.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Extremes of temperature and direct sunlight.
Incompatible Materials : No data available

11. Toxicological Information

Acute Toxicity (Oral LD50) : 1,098 mg/kg (female rat). Harmful if swallowed.
Acute Toxicity (Dermal LD50) : No data available. Not classified as hazardous under 29 CFR 1910.1200 (2012).
Acute Toxicity Inhalation LC50 : >2.17 mg/L/4 hour (male/female rat, combined). Harmful if inhaled.
Likely Routes of Exposure : Inhalation, eyes, ingestion
Skin Irritation : Not classified as hazardous under 29 CFR 1910.1200 (2012).
Eye Irritation : Causes eye irritation.
Skin Sensitization : Non-sensitizing.
Carcinogenic : >0.1% Crystalline quartz (respirable) carcinogen by ACGIH, NTP, IARC.
Chronic Effects : Specific Target Organ Toxicity, Repeated Exposure: May cause damage to organs through prolonged or repeated exposure.
Other Hazards : CA PROPOSITION 65 **WARNING!**: This product can expose you to chemicals, including Crystalline quartz (respirable), which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

12. Ecological Information

Ecotoxicity : No information available
Persistence and Degradability : No information available
Bioaccumulative Potential : No information available
Mobility in Soil : No information available
Other Adverse Effects : No information available

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

UN Proper Shipping Name : Not regulated by DOT. If shipped by air (IATA) or water (IMDG), classified as a marine pollutant.
Transport Hazard Class : None
UN Identification Number : None



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Packaging Group : None
Environmental Hazards : Not listed as a Marine Pollutant on Appendix B to 49 CFR 172.101. Classified as a marine pollutant if shipped by air (IATA) or water (IMDG).
Transport in Bulk : Not regulated by DOT in bulk packages.
Special Precautions for Transportation : If shipped by air (IATA) or water (IMDG), ship as: UN3077, Environmentally Hazardous Substance, Solid, n.o.s., (Indaziflam Mixture), 9, PG III, Marine Pollutant
Freight Classification : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating

Health: 1 Fire: 0 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No)

Immediate(Acute) Health: Y
Delayed (Chronic) Health: Y
Sudden Release of N
Pressure:
Fire: N
Reactive: N

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Registration Number : 264-1203-5905
FIFRA Signal Word : Caution
FIFRA Label Statement : Keep out of reach of children.
FIFRA Label Statement : Harmful if swallowed.
FIFRA Label Statement : Harmful if absorbed through skin.
FIFRA Label Statement : Causes moderate eye irritation.
FIFRA Label Statement : Avoid contact with skin, eyes or clothing.
FIFRA Label Statement : No additional label statements.
FIFRA Label Statement : No additional label statements.

16. Other Information

Data of Preparation/Revision : 19-December-2019