



Conforms to HazCom 2012/United States

# SAFETY DATA SHEET



## Clearcast® 2.7G

### Herbicide

#### Section 1. Identification

**GHS product identifier** : Clearcast® 2.7G Herbicide

**Supplier's details** : SePRO Corporation  
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Suite 600  
Carmel, IN 46032 U.S.A.  
Tel: 317-580-8282  
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Fax: 317-580-8290  
Monday - Friday, 8am to 5pm [E.S.T.](#)  
[www.sepro.com](http://www.sepro.com)

**Emergency telephone number** : INFOTRAC - 24-hour service 1-800-535-5053

#### Other means of identification

Molecular formula : C<sub>15</sub> H<sub>19</sub> N<sub>3</sub> O<sub>4</sub>  
Chemical family : imidazole derivative  
Synonyms : Imazamox (active ingredient)

The following recommendations for exposure controls and personal protection are intended for the manufacture, formulation and packaging of this product. For applications and/or use, consult the product label. The label directions supersede the text of this Safety Data Sheet for application and/or use.

#### Section 2. Hazards identification

##### Emergency overview

CAUTION:  
HARMFUL IF INHALED.  
HARMFUL IF ABSORBED THROUGH SKIN.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Avoid contact with the skin, eyes and clothing.  
KEEP OUT OF REACH OF CHILDREN.  
KEEP OUT OF REACH OF DOMESTIC ANIMALS.

See Product Label for additional precautionary statements.

State of matter: solid  
Color: grey  
Odor: odorless

**Potential health effects**

**Primary routes of exposure:** Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute toxicity:** Relatively nontoxic after single ingestion. Relatively nontoxic after short-term skin contact.

**Irritation / corrosion:** May cause moderate but temporary irritation to the eyes. May cause slight irritation to the skin.

**Sensitization:** Skin sensitizing effects were not observed in animal studies.

**Potential environmental effects**

**Aquatic toxicity:** There is a high probability that the product is not acutely harmful to fish. There is a high probability that the product is not acutely harmful to aquatic invertebrates. Very toxic (acute effect) to aquatic plants.

**Section 3. Composition/information on ingredients**

| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Chemical name</u>    |
|-------------------|----------------------|-------------------------|
| 114311-32-9       | 2.7 %                | imazamox                |
|                   | 97.3 %               | Proprietary ingredients |

**Section 4. First aid measures**

**General advice:** First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**If inhaled:** Remove the affected individual into fresh air and keep the person calm.

**If on skin:** Rinse skin immediately with plenty of water for 15 - 20 minutes.

**If in eyes:** Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

**If swallowed:** Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

**Note to physician**

Antidote: No known specific antidote.  
Treatment: Treat symptomatically.

**Section 5. Fire-fighting measures**

Auto-ignition: Not applicable  
Lower explosion limit: Not determined  
Upper explosion limit: Not determined



|  |  |
|--|--|
| Self-ignition temperature:                     | Not self-igniting  |
| <b>Suitable extinguishing media:</b>           | Foam, dry powder, carbon dioxide, water spray  |
| <b>Hazards during fire-fighting:</b>           | Carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, halogenated hydrocarbons, hydrocarbons<br>If product is heated above decomposition temperature, toxic vapors will be released. The substances/groups of substances mentioned can be released in case of fire. |
| <b>Protective equipment for fire-fighting:</b> | Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.   |
| <b>Further information:</b>                    | Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.  |

## Section 6. Accidental release measures

|                                   |   |
|-----------------------------------|---|
| <b>Personal precautions:</b>      | Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.  |
| <b>Environmental precautions:</b> | Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.   |
| <b>Cleanup:</b>                   | Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal. |

## Section 7. Handling and storage

### Handling

|   |  |
|---|--|
| <b>General advice:</b>                        | RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapors. Wear suitable personal protective clothing and equipment. |
| <b>Protection against fire and explosion:</b> | The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical   |



equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

### Storage

- General advice:** Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.
- Storage incompatibility:** General advice: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.
- Temperature tolerance** Protect from temperatures above: 40 °C  
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

## **Section 8. Exposure controls/personal protection**

**Users of a pesticidal product should refer to the product label for personal protective equipment requirements.**

- Advice on system design:** Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

### Personal protective equipment

#### **RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:**

- Respiratory protection:** Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.
- Hand protection:** Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.
- Eye protection:** Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.
- Body protection:** Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.
- General safety and hygiene measures:** Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

## Section 9. Physical and chemical properties

|  |                         |
|--|-------------------------|
| Form:  | solid, granules         |
| Odor:  | odorless                |
| Color:   | grey                    |
| pH value:  | 7.8 (1 %(m), 25 °C)     |
| Bulk density:  | 2,630 kg/m <sup>3</sup> |
| Vapour density:  | not determined          |
| Partitioning coefficient<br>n-octanol/water (log Pow): | not applicable          |
| Solubility in water:                                   | partly soluble          |
| Molar mass:  | 305.33 g/mol            |
| Evaporation rate:                                      | not applicable          |

## Section 10. Stability and reactivity

|                                |   |
|--------------------------------|---|
| <b>Conditions to avoid:</b>    | Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electrostatic discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded. |
| <b>Substances to avoid:</b>    | Strong oxidizing agents   |
| <b>Hazardous reactions:</b>    | The product is chemically stable.<br>No hazardous reactions if stored and handled as prescribed/indicated.  |
| <b>Decomposition products:</b> | No hazardous decomposition products if stored and handled as prescribed/indicated.  |
| <b>Thermal decomposition:</b>  | Possible thermal decomposition products:<br>Carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, Hydrocarbons<br>Stable at ambient temperature. If product is heated above decomposition temperature toxic vapors may be released. To avoid thermal decomposition, do not overheat.   |
| <b>Corrosion to metals:</b>    | Corrosive effects to metal are not anticipated.   |
| <b>Oxidizing properties:</b>   | Not an oxidizer.  |

## Section 11. Toxicological information

### Acute toxicity

|                |   |
|----------------|---|
| <b>Oral:</b>   | Type of value: LD50<br>Species: rat<br>Value: > 5,000 mg/kg<br>No mortality was observed.               |
| <b>Dermal:</b> | Type of value: LD50<br>Species: rat (male/female)<br>Value: > 5,050 mg/kg<br>No mortality was observed. |

**Irritation / corrosion**

**Skin:**  
Species: rabbit  
Result: non-irritant

**Eye:**  
Species: rabbit  
Result: mildly irritating

**Sensitization:**

Skin sensitization test  
Species: guinea pig  
Result: Non-sensitizing.

**Genetic toxicity**

*Information on: imazamox*  
*No mutagenic effect was found in various tests with microorganisms and mammals.*

**Carcinogenicity**

*Information on: imazamox*  
*In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.*

**Reproductive toxicity**

*Information on: imazamox*  
*The results of animal studies gave no indication of a fertility impairing effect.*

**Development:**

*Information on: imazamox*  
*No indications of a developmental toxic / teratogenic effect were seen in animal studies.*

**Section 12. Ecological information**

**Aquatic toxicity**

*Information on: imazamox*  
*Assessment of aquatic toxicity:*  
*There is a high probability that the product is not acutely harmful to fish. There is a high probability that the product is not acutely harmful to aquatic invertebrates. Very toxic (acute effect) to aquatic plants.*

**Fish**

*Information on: imazamox*  
*Acute: Oncorhynchus mykiss/LC50 (96 h): = > 122 ppm*

**Aquatic invertebrates**

*Information on: imazamox*  
*Acute: Daphnia magna/EC50: >122 ppm*

**Aquatic plants**

*Information on: imazamox*  
*Toxicity to aquatic plants: algae/EC50 (120 h): > 0.037 mg/l*

**Non-Mammals**

*Information on: imazamox*  
*Other terrestrial non-mammals: mallard duck/LC50: > 5,572 ppm*  
*Honey bee/LD50: > 100 ug/bee*

**Degradability / Persistence**

**Biological /**

**Abiological Degradation**

Evaluation: Not readily biodegradable (by OECD criteria).



### Section 13. Disposal considerations

**Waste disposal of substance:** Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container disposal:** Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

**RCRA:** This product is not regulated by RCRA.

### Section 14. Transport information

**Land transport** USDOT  
Not classified as a dangerous good under transport regulations

**Sea transport** IMDG  
Not classified as a dangerous good under transport regulations

**Air transport** IATA/ICAO  
Not classified as a dangerous good under transport regulations

### Section 15. Regulatory information

**Federal Regulations**

**Registration status:**  
Crop Protection TSCA, US released / exempt  
Chemical TSCA, US blocked / not listed

**EPCRA 311/312 (Hazard categories):** Acute

### Section 16. Other information

**Refer to product label for EPA registration number.**

Recommended use: herbicide

**SDS Prepared by:** SePRO Corporation

SDS Prepared on: 08/12/15

Notice to reader

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