

Material Safety Data Sheet



Edgeless* Liquid Turf Growth Regulator

1. Product and company identification

Product name	: Edgeless* Liquid Turf Growth Regulator
EPA Registration Number	: 67690-46
Material uses	: Turf growth regulator.
Supplier/Manufacturer	: SePRO Corporation 11550 North Meridian Street Suite 600 Carmel, IN 46032 U.S.A. Tel: 317-580-8282 Toll free: 1-800-419-7779 Fax: 317-428-4577 Monday - Friday, 8am to 5pm E.S.T. www.sepro.com
Responsible name	: KMK Regulatory Services Inc.
In case of emergency	: INFOTRAC - 24-hour service 1-800-535-5053

2. Hazards identification

Physical state	: Liquid. [Slightly viscous.]
Odor	: Sweet aromatic like lacquer.
OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Emergency overview	: MAY BE HARMFUL IF SWALLOWED. May be harmful if swallowed. Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Inhalation	: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	: May be harmful if swallowed.
Skin	: No known significant effects or critical hazards.
Eyes	: No known significant effects or critical hazards.
Potential chronic health effects	
Chronic effects	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Over-exposure signs/symptoms	
Inhalation	: No specific data.
Ingestion	: No specific data.
Skin	: Adverse symptoms may include the following: irritation redness
Eyes	: Adverse symptoms may include the following: pain or irritation watering redness
Medical conditions aggravated by over-exposure	: None known.

* indicates trademark of SePRO Corporation.

See toxicological information (Section 11)

3. Composition/information on ingredients

United States		
Name	CAS number	%
Active ingredient:		
5-pyrimidinemethanol, alpha-(1-methylethyl)-alpha-(4-(trifluoromethoxy)phenyl)-	56425-91-3	10 - 30
Ethyl 4-cyclopropyl(hydroxy)methylene-3,5-dioxocyclohexanecarboxylate	95266-40-3	5
Inert ingredient:		
Proprietary Alcohol	Proprietary	30 - 60

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.
- Inhalation** : Move exposed person to fresh air. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call medical doctor or poison control center immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

- Flammability of the product** : No specific fire or explosion hazard.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : Provide adequate ventilation. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up**
- Small spill** : Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- : Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : No special ventilation requirements. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Hygiene measures** : Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Personal protection**
- Applicators should refer to the product label for personal protective clothing and equipment.**
- Respiratory** : Not required under normal conditions of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Ensure an MSHA/NIOSH-approved respirator or equivalent is used.
- Hands** : Use gloves appropriate for work or task being performed. Recommended: Natural rubber (latex).
- Eyes** : Safety eyewear should be used when there is a likelihood of exposure. Recommended: Safety glasses with side shields.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Lab coat.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

- Physical state** : Liquid. [Slightly viscous.]
- Color** : Amber. Clear.
- Odor** : Sweet aromatic like lacquer.
- pH** : 3.15
- Boiling/condensation point** : Not available.
- Relative density** : 0.99
- Vapor pressure** : Not available.
- VOC** : 36.5 % (w/w)
- Viscosity** : Kinematic: 1.175 cm²/s (117.5 cSt)

Solubility : Not available.

10 . Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-Ethylhexan-1-ol	LD50 Dermal LD50 Dermal LD50 Oral	Rabbit Rat Rat	1970 mg/kg >3000 mg/kg 3730 mg/kg	- - -
5-pyrimidinemethanol, alpha-(1-methylethyl)-alpha-(4-(trifluoromethoxy)phenyl)-	LC50 Inhalation Vapor LD50 Dermal LD50 Oral	Rat Rabbit Rat	1100 mg/m3 >2 g/kg 709 mg/kg	4 hours - -

Chronic toxicity : No specific data.

12 . Ecological information

Environmental effects : Not established

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
2-Ethylhexan-1-ol	Acute LC50 10 mg/L Fresh water	Fish - Lepomis macrochirus - 0.1 g	96 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

DOT/IMDG/IATA : Not regulated.

15 . Regulatory information

HCS Classification : Not regulated.

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Proprietary Alcohol

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Proprietary Alcohol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

- Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed
- State regulations** :
 - Connecticut Carcinogen Reporting:** None of the components are listed.
 - Connecticut Hazardous Material Survey:** None of the components are listed.
 - Florida substances:** None of the components are listed.
 - Illinois Chemical Safety Act:** None of the components are listed.
 - Illinois Toxic Substances Disclosure to Employee Act:** None of the components are listed.
 - Louisiana Reporting:** None of the components are listed.
 - Louisiana Spill:** None of the components are listed.
 - Massachusetts Spill:** None of the components are listed.
 - Massachusetts Substances:** The following components are listed: Proprietary Alcohol
 - Michigan Critical Material:** None of the components are listed.
 - Minnesota Hazardous Substances:** None of the components are listed.
 - New Jersey Hazardous Substances:** None of the components are listed.
 - New Jersey Spill:** None of the components are listed.
 - New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.
 - New York Acutely Hazardous Substances:** None of the components are listed.
 - New York Toxic Chemical Release Reporting:** None of the components are listed.
 - Pennsylvania RTK Hazardous Substances:** The following components are listed: Proprietary Alcohol
 - Rhode Island Hazardous Substances:** None of the components are listed.

California Prop. 65

No products were found.

International regulations

- International lists** :
 - Australia inventory (AICS):** Not determined.
 - China inventory (IECSC):** Not determined.
 - Japan inventory:** Not determined.
 - Korea inventory:** Not determined.
 - New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.
 - Philippines inventory (PICCS):** Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

16 . Other information

Label requirements : MAY BE HARMFUL IF SWALLOWED.

Hazardous Material Information System (U.S.A.) :

Health	1
Flammability	0
Physical hazards	0

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Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



Date of issue : 02/01/2011

Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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