



# Material Safety Data Sheet



## Green slime remover / Outdoor path cleaner

### Section 1. Chemical product and company identification

**Manufacturer** : HG International b.v. **Code** : 1811001  
**Address** : Damsluisweg 70 1332 EJ Almere **MSDS#** : 2.01  
**Country** : Netherlands **Validation date** : 1/12/2009.  
**Telephone No.:** : +31 (0)36 54 94 700 **Print date** : 1/12/2009.  
**Fax** : +31 (0)36 54 94 744 **Responsible name** : P. Stienstra  
**Internet:** : www.hg.eu **Telephone No.:** : +1.705.726.5445  
**Supplier** : Solstrand Trading **Fax** : +1.705.734.0857  
**Address** : 60 Lockhart road Barrie, Ontario L4N 9G8 **Country** : Canada  
**Material uses** : Cleaner.  
**In Case of Emergency** : Chem. Tel Inc. (813) 248 0585 or Toll free (800) 255 3924

### Section 2. Composition, Information on Ingredients

Name	CAS #	% by weight	Exposure limits
propan-2-ol	67-63-0	1 - 5	

### Section 3. Hazards identification

**Physical State and Appearance** : Liquid.

**Emergency overview** : No specific hazard.  
No specific hazard.  
Keep out of the reach of children.  
Avoid contact with skin and eyes.

**Routes of entry** : Dermal contact. Eye contact. Ingestion.

**Potential acute health effects**

**Eyes** : May cause eye irritation.  
**Skin** : May cause skin irritation.

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Ingestion** : No known significant effects or critical hazards.

**Potential chronic health effects** : **CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [propan-2-ol].  
**MUTAGENIC EFFECTS:** Not available.  
**TERATOGENIC EFFECTS:** Not available.

**Medical conditions aggravated by overexposure:** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

**Over-exposure signs/symptoms** : Not available.

[See toxicological Information \(section 11\)](#)

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## **Section 4. First aid measures**

- Eye Contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Skin Contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Notes to Physician** : Not available.

## **Section 5. Fire fighting measures**

- Flammability of the product** : May be combustible at high temperature.
- Auto-ignition Temperature** : Lowest known value: 399°C (750.2°F) (propan-2-ol).
- Flash Points** : Closed cup: Between 61°C (142°F) and 93.3°C (200°F). (Pensky-Martens.)
- Flammable limits** : Not available.
- Products of combustion** : Decomposition products may include the following materials: carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...), halogenated compounds, hydrogen chloride.
- Fire hazards in presence of various substances** : Not available.
- Explosion hazards in presence of various substances** : Not available.
- Fire fighting media and instructions** : Use an extinguishing agent suitable for the surrounding fire.  
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.  
Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- 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.
- Special remarks on fire hazards** : Not available.
- Special remarks on explosion hazards** : Not available.

## **Section 6. Accidental release measures**

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

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- 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** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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). Use spark-proof tools and explosion-proof equipment. 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.

## Section 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 get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

## Section 8. Exposure Controls, Personal Protection

**Engineering controls** : No special ventilation requirements.

**Personal protection**

- Eyes** : Recommended: safety glasses with side shields
- Skin** : Recommended: Work uniform or laboratory coat.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.
- Hands** : >8 hours (breakthrough time): Butyl rubber gloves.
- Other protection** : Not available.

**Personal protective equipment (Pictograms)** :



**Personal protection in case of a large spill** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be adequate. Consult a specialist before handling this product.

**Product Name**

propan-2-ol

**Exposure limits**

**ACGIH (United States).**

TWA: 400 ppm

**ACGIH TLV (United States, 1/2004). Notes: ACGIH 2003 Adoption Refers to Appendix A -- Carcinogens.**

STEL: 400 ppm 15 minute(s). Form: All forms

TWA: 200 ppm 8 hour(s). Form: All forms

[Consult local authorities for acceptable exposure limits.](#)

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## Section 9. Physical and chemical properties

Physical State and Appearance	: Liquid.
Color	: Colorless. Clear.
Odor	: Odorless.
pH	: 8 [Basic.]
Relative density	: 0.99 g/cm <sup>3</sup> (20°C / 68°F)
Viscosity	: Not available.
Solubility	: Easily soluble in the following materials: diethyl ether, acetone. Soluble in the following materials: cold water, hot water.
Flash point	: Closed cup: Between 61°C (142°F) and 93.3°C (200°F). (Pensky-Martens.)
Explosive properties	: Not available.
Oxidizing properties	: Not applicable
Physical chemical comments	: Solubility in other solvents: not soluble

## Section 10. Stability and reactivity

Stability and Reactivity	: The product is stable.
Conditions of instability	: Stable under recommended storage and handling conditions (see section 7).
Incompatibility with various substances	: Slightly reactive to reactive with acids.
Hazardous Decomposition Products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Will not occur.

## Section 11. Toxicological information

Chronic effects on humans	: <b>CARCINOGENIC EFFECTS:</b> Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [propan-2-ol]. Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
Other toxic effects on humans	: Hazardous by the following route of exposure: of skin contact (irritant), of eye contact (irritant).
Special remarks on toxicity to animals	: Not available.
Special remarks on chronic effects on humans	: Not available.
Special remarks on other toxic effects on humans	: Not available.
Specific effects	
Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Reproduction toxicity	: No known significant effects or critical hazards.

## Section 12. Ecological information

propan-2-ol	Pimephales promelas (EC50)	48 hour(s)	10000 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>1400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	6550 mg/l
	Pimephales promelas (LC50)	96 hour(s)	9640 mg/l
	Pimephales promelas (LC50)	96 hour(s)	10400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	11130 mg/l
BOD and COD	: Not available.		
Biodegradable/OECD	: Readily biodegradable		

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- Mobility** : Not available.
- Products of degradation** : Products of degradation: carbon oxides (CO, CO<sub>2</sub>) and water, nitrogen oxides (NO, NO<sub>2</sub> etc.), halogenated compounds.
- Toxicity of the products of biodegradation** : Not available.
- Special remarks on the products of biodegradation** : Not available.

### Section 13. Disposal considerations

- Waste information** : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Waste stream** : Not available.

Consult your local or regional authorities.

### Section 14. Transport information

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>DOT Classification</b>	Not regulated.	-	-	-		-
<b>TDG Classification</b>	Not regulated.	-	-	-		-
<b>ADR/RID Class</b>	Not regulated.	-	-	-		<b>Remarks</b> Keep in frostfree area
<b>IMDG Class</b>	Not regulated.	-	-	-		<b>Remarks</b> Keep in frostfree area
<b>IATA-DGR Class</b>	Not regulated.	-	-	-		<b>Remarks</b> Keep in frostfree area

### Section 15. Regulatory information

- WHMIS (Canada)** : No WHMIS class seems to be applicable.  
**CEPA Toxic substances**: None of the components are listed.  
**Canadian ARET**: None of the components are listed.  
**Canadian NPRI**: None of the components are listed.  
**Alberta Designated Substances**: None of the components are listed.  
**Ontario Designated Substances**: None of the components are listed.  
**Quebec Designated Substances**: None of the components are listed.

International regulations

- EINECS** :
- DSCL (EEC)** : R36/38- Irritating to eyes and skin.
- International lists** : **Australia inventory (AICS)**: Not determined.  
**China inventory (IECSC)**: Not determined.  
**Korea inventory (KECI)**: Not determined.  
**Philippines inventory (PICCS)**: Not determined.  
**Japan inventory (ENCS)**: Not determined.

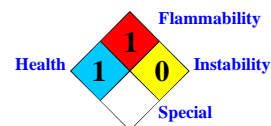
## Section 16. Other information

**Label Requirements** : No specific hazard.

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

Health	*	1
Fire hazard		1
Reactivity		0
Personal protection		

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



**References** : Not available.

**Other special considerations** : Not available.

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**Notice to reader**

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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.