



# United States Material Safety Data Sheet

The Scotts Company  
14111 Scottslawn Road  
Marysville, Ohio 43041  
United States

24 h. EMERGENCY TELEPHONE NUMBER  
CHEMTREC (U.S.) 1-800-424-9300  
CHEMTREC (International) 1-703-527-3887  
Non-Emergency Calls  
1-937-644-0011

## HALTS CRABGRASS PREVENTER

### 1. Product and company identification

MSDS # : 320000000505  
EPA Registration Number: : 538-192

### 2. Hazards identification

**Physical state** : solid [Granular]  
**Color** : Yellow  
**Odor** : Fertilizer  
**Signal word** : CAUTION!  
**Precautionary measures** : Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Wash thoroughly after handling.  
**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
**Emergency Overview** : Causes eye irritation.  
Avoid contact with eyes, skin and clothing.  
Harmful by inhalation.  
Harmful if swallowed.  
Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

#### Potential acute health effects

**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.  
**Skin** : No known significant effects or critical hazards.  
**Eyes** : No known significant effects or critical hazards.  
**Target organs** : Contains material which causes damage to the following organs:  
skin  
eyes

**Potential chronic health effects** : See section 11 for more information.

#### Over-exposure signs/symptoms

*Report version.Re port*  
**Version:** *version*      **Date of issue/Date of revision:** *Validity date\*\*\**      **Date of previous issue:** 08/08/2011

- Inhalation** : No specific data.  
**Ingestion** : No specific data.  
**Skin** : No specific data.  
**Eyes** : No specific data.  
**Medical conditions aggravated by over-exposure** : Pre-existing skin disorders may be aggravated by over-exposure to this product.  
**See toxicological information (Section 11)**

### 3. Composition/information on ingredients

Name	CAS number	%
Cellulose	9004-34-6	>40 - <=70
Kaolin	1332-58-7	>30 - <=40
Carbonic acid calcium salt (1:1)	471-34-1	>15 - <=30
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-	9016-45-9	>1 - <=3
2,4-Pentanediol, 2-methyl-	107-41-5	>1 - <=3
N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine	40487-42-1	>1 - <=3
Titanium oxide (TiO2)	13463-67-7	>0.5 - <=1

### 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.
- 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. Get medical attention immediately.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

### 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.

- Special exposure hazards** : 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.

- Hazardous thermal** : Decomposition products may include the following materials:

*Report  
version.Re  
port*  
**Version:** *version*

**Date of issue/Date of revision:** *Validity date\*\*\**

**Date of previous issue:** *08/08/2011*

<b>decomposition products</b>	carbon dioxide carbon monoxide nitrogen oxides
<b>Special protective equipment for fire-fighters</b>	: 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

<b>Personal precautions</b>	: 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
<b>Environmental precautions</b>	: Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

### Methods for cleaning up

<b>Small spill</b>	: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
<b>Large spill</b>	: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. Handling and storage

<b>Handling</b>	: 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. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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.
<b>Storage</b>	: 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

### Occupational exposure limits

<i>Report version</i>	<i>Report version</i>	<i>Date of issue</i> / <i>Date of revision</i>	<i>Validity date</i> ***	<i>Date of previous issue</i>	08/08/2011
<b>Version:</b>	<i>version</i>				

Ingredient	Exposure limits
Cellulose	<p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust</p> <p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable fraction</p> <p><b>NIOSH REL (1994-06-01)</b> Time Weighted Average (TWA) 10 mg/m3 Form: Total</p> <p><b>NIOSH REL (1994-06-01)</b> Time Weighted Average (TWA) 5 mg/m3 Form: Respirable fraction</p> <p><b>ACGIH TLV (1994-09-01)</b> TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m3</p>
Kaolin	<p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust</p> <p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable fraction</p> <p><b>NIOSH REL (1994-06-01)</b> Time Weighted Average (TWA) 10 mg/m3 Form: Total</p> <p><b>NIOSH REL (1994-06-01)</b> Time Weighted Average (TWA) 5 mg/m3 Form: Respirable fraction</p> <p><b>ACGIH TLV (1996-05-18)</b> Notes: The agent (mixture, or exposure circumstance) is not classifiable as to its carcinogenicity to humans. 1996 Adoption Refers to Appendix A -- Carcinogens.</p> <p>TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 2 mg/m3 Form: Respirable fraction: means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 4 µm at 50 per cent collection efficiency.</p>
Carbonic acid calcium salt (1:1)	<p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust</p> <p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable fraction</p>
2,4-Pentanediol, 2-methyl-	<p><b>NIOSH REL (1994-06-01)</b> Threshold Limit Value - Ceiling (TLV-C) 125 mg/m3 , 25 ppm</p> <p><b>ACGIH TLV (1994-09-01)</b> Threshold Limit Value - Ceiling (TLV-C) 121 mg/m3 , 25 ppm</p>
Titanium oxide (TiO2)	<p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust</p> <p><b>NIOSH REL (1994-06-01)</b> Notes: NIOSH potential occupational carcinogen See Appendix A - NIOSH Potential Occupational Carcinogen</p> <p><b>ACGIH TLV (1996-05-18)</b> Notes: The agent (mixture, or exposure circumstance) is not classifiable as to its</p>

Report  
version.Re  
port  
Version: version

Date of issue/Date of revision: Validity date\*\*\*

Date of previous issue: 08/08/2011

	<p>carcinogenicity to humans. Substance identified by other sources as a suspected or confirmed human carcinogen. Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL. 1996 Adoption Refers to Appendix A -- Carcinogens. TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m3</p>
--	--

**Consult local authorities for acceptable exposure limits.**

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, 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. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : If user operations generate dust, fumes, gas, vapor or mist, 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** : 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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protection**

- Respiratory** : Use a properly fitted, particulate filter 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** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Eyes** : Protective eyewear is not required, but may be used in situations where contact is expected.
- Skin** : Wear long-sleeved shirt, long pants, shoes with socks. Remove and wash contaminated clothing before reuse.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Report version.Re port  
**Version:** version      **Date of issue/Date of revision:**      **Validity date\*\*\*:**      **Date of previous issue:** 08/08/2011

## 9. Physical and chemical properties

Physical state	: solid [Granular]
Flash point	: Not Applicable
Burning time	: Not Applicable
Auto-ignition temperature	: Not Applicable
Flammable limits	: Not Applicable
Density	: 45 lb/ft3
Color	: Yellow
Odor	: Fertilizer
pH	: Not applicable.
Boiling/condensation point	: Not Applicable
Melting/freezing point	: Not Applicable
Relative density	: Not Applicable
Vapor pressure	: Not Applicable
Vapor density	: Not Applicable
Volatility	: Not Applicable
Odor threshold	: Not Applicable
Evaporation rate	: Not Applicable
Viscosity	: Not Applicable
Solubility	: Not Applicable
Solubility in water	: Not Applicable

## 10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
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.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Product	LD50 Oral	Rat	> 5,000 mg/kg	-
Product	LD50 Dermal	Rabbit	> 2,000 mg/kg	-

Conclusion/Summary Very low toxicity to humans or animals.

### Irritation/Corrosion

Skin	Non-irritating
Eyes	Irritating
Respiratory	Not available.

### Sensitizer

Conclusion/Summary	Skin	Not sensitizing
	Respiratory	Not available.

### Chronic toxicity

Conclusion/Summary No known significant effects or critical hazards.

Report  
version.Re  
port  
Version: version

Date of issue/Date of revision: Validity date\*\*\*

Date of previous issue: 08/08/2011

**Carcinogenicity**

Product/ingredient name	Result	Species	Dose	Exposure
Conclusion/Summary	No known significant effects or critical hazards.			

**Classification**

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Kaolin	A4					
Titanium oxide (TiO <sub>2</sub> )	A4	2B		+		

**Mutagenicity**

Conclusion/Summary	No known significant effects or critical hazards.
--------------------	---

**Teratogenicity**

Product/ingredient name	Result	Species	Dose	Exposure
Conclusion/Summary	No known significant effects or critical hazards.			

**Reproductive toxicity**

Conclusion/Summary	No known significant effects or critical hazards.
--------------------	---

**12. Ecological information**

**Ecotoxicity** : This pesticide is toxic to fish.

**Aquatic ecotoxicity**

Product/ingredient name	Result	Species	Exposure
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-			
	Acute LC50 4.7 mg/l Fresh water	Fish - Rainbow trout,donaldson trout	4 d
	Acute LC50 5 mg/l Fresh water	Fish - Zebra danio	4 d
	Acute LC50 7.6 mg/l Fresh water	Fish - Bluegill	4 d
	Acute EC50 12 mg/l Fresh water	Aquatic plants - Green algae	4 d
2,4-Pentanediol, 2-methyl-			
	Acute LC50 > 10,000 mg/l Fresh water	Fish - Bluegill	4 d
	Acute EC50 2,800 mg/l Fresh water	Aquatic invertebrates. Water flea	2 d
N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine			
	Acute LC50 0.138 mg/l Fresh water	Fish - Rainbow trout,donaldson trout	4 d
	Acute EC50 0.368 mg/l Fresh water	Aquatic plants - Green algae	3 d
Titanium oxide (TiO <sub>2</sub> )			
	Acute EC50 > 1,000 mg/l Fresh water	Aquatic invertebrates. Water flea	2 d
	Acute EC50 5.83 mg/l	Aquatic plants - Green	3 d

Report  
version.Re  
port  
Version: version

Date of issue/Date of revision: Validity date\*\*\*

Date of previous issue: 08/08/2011

	Fresh water	algae	
--	-------------	-------	--

**Conclusion/Summary** : No known significant effects or critical hazards.

### Persistence/degradability

**Conclusion/Summary** : No known significant effects or critical hazards.

**Partition coefficient: n-octanol/water** : No known significant effects or critical hazards.

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations

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

## 14. Transport information

### Regulatory

<u>Regulatory information</u>	<u>UN no.</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>PG*</u>	<u>Note</u>
DOT		Not Regulated			
IATA (C)		Not Regulated			
IATA (P)					
IMDG		Not Regulated			
TDG		Not Regulated			
PG* : Packing group					

## 15. Regulatory information

### United States

**U.S. Federal regulations** : **United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.  
**United States - TSCA 8(a) - Inventory update rule (IUR):** Not determined  
**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:** No products were found.  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:** Kaolin: Del Carbonic acid calcium salt (1:1): Acu 2,4-Pentenediol, 2-methyl-: Acu N-(1-ethylpropyl)-2,6-dinitro-3,4-xylydine: Del  
**Clean Air Act (CAA) 112 accidental release prevention:** The following components are listed: Oxirane

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

### State regulations

*Report version.Report version*  
**Version:** *version* **Date of issue/Date of revision:** *Validity date\*\*\** **Date of previous issue:** 08/08/2011

- Massachusetts** : The following components are listed: Cellulose 2,4-Pentanediol, 2-methyl-
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: Cellulose Kaolin 2,4-Pentanediol, 2-methyl- N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Titanium oxide (TiO2)
- Pennsylvania** : The following components are listed: Cellulose Kaolin 2,4-Pentanediol, 2-methyl- Titanium oxide (TiO2)
- California Prop. 65** : WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer., WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Oxirane	Yes.	Yes.	2 µg/day	No.
	Yes.	Yes.	No.	20 µg/day

**International regulations**

- Canada inventory** : All components are listed or exempted.
- International lists** :
  - Australia inventory (AICS):** At least one component is not listed.
  - New Zealand Inventory of Chemicals (NZIoC):** At least one component is not listed.
  - China inventory (IECSC):** At least one component is not listed.
  - Japan inventory:** At least one component is not listed.
  - Korea inventory:** At least one component is not listed.
  - Philippines inventory (PICCS):** At least one component is not listed.
  - Taiwan inventory (CSNN):** Not determined.
  - Malaysia Inventory (EHS Register):** Not determined.

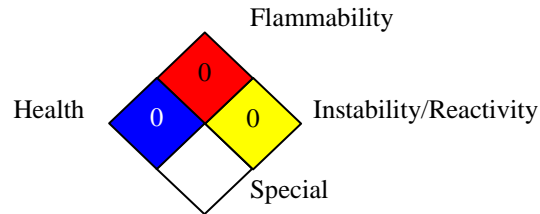
**16.Other information**

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

<b>Health</b>	1
<b>Flammability</b>	0
<b>Physical hazards</b>	0

**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.**

Report  
version.Re  
port  
Version: version      Date of issue/Date of revision:      Validity date\*\*\*      Date of previous issue: 08/08/2011

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

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**Date of printing** : Print date  
**Date of issue** : Validity date\*\*\*.  
**Version** : Report version.Report version

**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.

*Report version.Re*  
*port*  
**Version:** *version*      **Date of issue/Date of revision:** *Validity date\*\*\*.*      **Date of previous issue:** *08/08/2011*