



Material Safety Data Sheet

United States

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

STEP 2 WEED CONTROL PLUS LAWN FOOD

1. Product and company identification

EPA Registration Number: : 538-270
MSDS # : 320000004231

2. Hazards identification

Physical state : Solid [granular solid]

Odor : Phenoxy

OSHA/HCS status : This material is/or contains a chemical that is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : CAUTION!
Harmful if absorbed through the skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust, vapor or spray mist. When using this product, wear long-sleeved shirt, long pants, socks, shoes, and rubber gloves.

Potential chronic health effects

Chronic effects : Contains material that can cause target organ damage.

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.

Target organs : Contains material which causes damage to the following organs:
kidneys
liver
skin
eyes
central nervous system (CNS)

Over-exposure signs/symptoms

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.

Interactions with other Chemicals : Not available.

See toxicological information (section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Urea	57-13-6	40 - 70
2,4-D (ISO)	94-75-7	1 - 3

4. First aid measures

- Eye contact** : 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 poison control center or doctor for treatment advice.
- Skin contact** : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation** : Move person 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 poison control center or doctor for further treatment advice.
- Ingestion** : Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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** : 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** : Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Do not apply directly to water.
- Methods for cleaning up** : Vacuum or sweep up material and place in container for disposal. Never place down drain.

7. Handling and storage

- Handling** : Avoid inhalation or contact with skin, eyes or clothing. Avoid container breakage. Do not contaminate water sources when disposing of equipment washwater or rinsate. Keep out of lakes, stream or ponds. Keep out of reach of children.
- Storage** : Store in original container in a cool, dry, well-ventilated area inaccessible to children and pets. Do not contaminate food or feedstuffs.

8. Exposure controls/personal protection

<u>Product name</u>	<u>Exposure limits</u>
Urea	AIHA WEEL (1999-01-01) Time Weighted Average (TWA) 10 mg/m ³
2,4-D (ISO)	OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 10 mg/m ³ OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 10 mg/m ³ NIOSH REL (1994-06-01) Time Weighted Average (TWA) 10 mg/m ³ ACGIH TLV (1996-05-18) Notes: The agent (mixture, or exposure circumstance) is not classifiable as to its carcinogenicity to humans. Refers to Appendix A -- Carcinogens. 1996 Adoption TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m ³

Consult local authorities for acceptable exposure limits.

- Engineering measures** : Use adequate ventilation to keep the airborne concentrations below the recommended exposure standard.
- Hygiene measures** : Wash thoroughly with soap and water after handling. Remove and launder contaminated clothing before reuse.

Personal protection

- Respiratory** : No special respiratory protection required. If ventilation is inadequate to keep the airborne concentrations below the recommended exposure standard wear appropriate respiration protection.
- Hands** : Protective gloves are not required, but may be used in situations where significant contact is expected.
- 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.

9. Physical and chemical properties

Physical state	: Solid [granular solid]
Color	: Off-white.
Flash point	: Not available.
Auto-ignition temperature	: Not available.
Odor	: Phenoxo
Odor threshold	: Not available.
pH	: Not available.
Boiling/condensation point	: Not available.
Melting/freezing point	: Not available.
Critical temperature	: Not available.
Density	: 44 LBF
Vapor pressure	: Not available.

Vapor density : Not available.
Evaporation rate : Not available.
Viscosity : Not available.
Solubility : Not available.
Partition Coefficient (n-octanol) : Not available.
Decomposition temperature : Not available.

10. Stability and reactivity

Chemical stability : The product is stable.
Conditions to avoid : No specific data.
Materials to avoid : 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	LC50 Inhalation	Rat	> 2.0 mg/l	-
Product	LD50 Dermal	Rabbit	> 5,000 mg/kg	-

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

Irritation/Corrosion

Skin : Non-irritating
Eyes : Mild.
Respiratory : May cause respiratory irritation

Sensitizer

Conclusion/Summary : Skin : Not sensitizing
Respiratory : Not sensitizing - based on the individual components.

Chronic toxicity

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

Carcinogenicity

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

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
2,4-D (ISO)	A4					

Mutagenicity

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

Teratogenicity

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

Reproductive toxicity

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

12. Ecological information

Ecotoxicity : Toxic to fish and aquatic invertebrates and may adversely affect non-target plants.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
2,4-D (ISO)	Acute LC50 24.5 mg/l Fresh water	Fish - Cutthroat trout	4 d
2,4-D (ISO)	Acute EC50 25.9 mg/l Fresh water	Aquatic plants - Green algae	4 d
Conclusion/Summary	No known significant effects or critical hazards.		

Persistence/degradability

Conclusion/Summary 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 information

<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
California Prop. 65 : Not listed.
United States inventory (TSCA 8b) : All components are listed or exempted.
Canada inventory : At least one component is not listed.

16. Other information

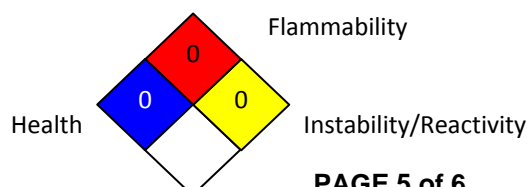
Hazardous Material Information System (U.S.A.) :

Health	1
Flammability	0
Physical hazards	0

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

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Special

Latest revision date	05/07/2012
Date of previous issue	00/00/0000
Version	0.0

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