



Bonide DuraTurf Crabgrass Plus Crabgrass & Broadleaf Weed Killer

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Bonide DuraTurf Crabgrass Plus Crabgrass & Broadleaf Weed Killer
Product code : 22179734

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Herbicide

1.3. Details of the supplier of the safety data sheet

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424
T (315) 736-8231
www.bonide.com

1.4. Emergency telephone number

Emergency number : CHEMTREC - 1 (800) 424-9300 and/or 1 (703) 527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Sens. 1 H317
Carc. 2 H351

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer.

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing dust
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P308+P313 - IF exposed or concerned: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose of contents/container to in accordance with local/national regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%	Classification (GHS-US)
2,4-dichlorophenoxyacetic acid	(CAS No) 94-75-7	0.675	Carc. 2, H351
Quinclorac	(CAS No) 84087-01-4	0.346	Skin Sens. 1, H317
Dithopyr	(CAS No) 97886-45-8	0.121	Not classified

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Name	Product identifier	%	Classification (GHS-US)
Dicamba	(CAS No) 1918-00-9	0.06	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.
- First-aid measures after inhalation : Assure fresh air breathing. Allow the person to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing dust. Do not handle until all safety precautions have been read and understood.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use.

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Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Respiratory protection : Wear approved mask.
Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : White and brown granules
Color : White and brown
Odor : Odorless
Odor threshold : No data available
pH : No data available
pH solution : 6.59
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : Insoluble in water.
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

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10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

2,4-dichlorophenoxyacetic acid (94-75-7)	
LD50 oral rat	630-774,Rat; Other; Experimental value; 375 mg/kg; Rat
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Experimental value; Other)

Dicamba (1918-00-9)	
LD50 oral rat	1039 mg/kg (Rat)
LD50 dermal rat	2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

2,4-dichlorophenoxyacetic acid (94-75-7)	
IARC group	2B - Possibly Carcinogenic to Humans

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation : May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

2,4-dichlorophenoxyacetic acid (94-75-7)	
LC50 fish 1	31 - 96 mg/l (96 h; Cyprinus carpio)
EC50 Daphnia 1	90 mg/l (48 h; Daphnia magna)
LC50 fish 2	82 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 1	375 mg/l (48 h; Lepomis macrochirus)
Threshold limit algae 1	< 0.1 mg/l (Scenedesmus quadricauda; Chronic)
Threshold limit algae 2	26.4 mg/l (120 h; Selenastrum capricornutum; Growth rate)

Dicamba (1918-00-9)	
LC50 fish 1	23 mg/l (96 h; Lepomis macrochirus)
LC50 other aquatic organisms 1	10 - 100 mg/l (96 h)
EC50 Daphnia 1	> 100 mg/l (48 h; Daphnia magna; Locomotor effect)
LC50 fish 2	28 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 1	40 ppm (48 h; Lepomis macrochirus)
TLM fish 2	35 ppm 48 h; Salmo gairdneri (Oncorhynchus mykiss)
Threshold limit other aquatic organisms 1	10 - 100,96 h

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12.2. Persistence and degradability

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Persistence and degradability	Not established.
2,4-dichlorophenoxyacetic acid (94-75-7)	
Persistence and degradability	Readily biodegradable in water. Inhibition of nitrification. Biodegradable in the soil. No (test) data on mobility of the substance available.
Quinclorac (84087-01-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Bonide DuraTurf Crabgrass Plus Crabgrass & Broadleaf Weed Killer	
Bioaccumulative potential	Not established.
2,4-dichlorophenoxyacetic acid (94-75-7)	
BCF fish 1	< 10 (3 days; Leuciscus idus)
BCF other aquatic organisms 1	6 (24 h; Algae)
Log Pow	2.58 - 2.83 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Dicamba (1918-00-9)	
Log Pow	2.21
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Quinclorac (84087-01-4)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

Dicamba (1918-00-9)	
Ecology - soil	Not toxic to bees.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
No dangerous good in sense of transport regulations

Additional information

Other information : No supplementary information available.

SECTION 15: Regulatory information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Causes moderate eye irritation.
Avoid contact with eyes, skin or clothing.

RCRA STATUS: When discarded in its purchased form, this product is a listed RCRA hazardous waste and should be managed as a hazardous waste. (40 CFR 261.20-24)

15.1. US Federal regulations

No additional information available

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15.2. International regulations

No additional information available

15.3. US State regulations

2,4-dichlorophenoxyacetic acid (94-75-7)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Carc. 2	Carcinogenicity Category 2
Skin Sens. 1	Skin sensitization Category 1
H302	Harmful if swallowed
H312	Harmful in contact with skin
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer

SDS US (GHS HazCom 2012) - Pesticides

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.