



Bonide KleenUp Weed & Grass Killer 41% Super Concentrate

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 KleenUp Weed & Grass Killer 41% Super Concentrate
Product code : 4484

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

Telephone Number: (315) 736-8231

Comment: Bonide hours of operation are 8:00 a.m. to 4:30 p.m EST.

Website: www.bonide.com

Email address: sales@bonide.com

1.4. Emergency telephone numbers (24 hour)

Medical : SafetyCall - (833) 972-1101
Spills : 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)

Eye Irritation 1 H318
Aquatic Chronic 2 H411

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H318 - Causes serious eye damage
H411 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS-US) : P280 - Wear gloves/protective clothing/eye protection
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician
P273 - Avoid release to the environment.
P405 - Store locked up
P501 - Dispose of contents/container to in accordance with local/national regulations

2.3. Other hazards

May react with metals such as galvanized or mild steel to produce hydrogen gall which could form a highly combustible gas mixture.

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%
Isopropylamine Salt of Glyphosate	(CAS No) 38641-94-0	41

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).

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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.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
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 eye contact	: Causes serious eye damage. Note: No cases of irreversible eye effects could be attributed to glyphosate formulation in an extensive epidemiological survey or reported accidental eye contact with these formulations.
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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	: Water spray. Carbon dioxide. Dry chemical.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: This material does not burn.
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5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	: Smoke from fires involving this material may present unusual hazards. . Avoid breathing smoke and mists. Avoid contact with fallout and runoff.

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.
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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. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

KEEP OUT OF REACH OF CHILDREN!

Precautions for safe handling	: Use only in a well-ventilated area. Provide good ventilation in process area to prevent formation of vapor. Wear appropriate safety equipment when handling.
Hygiene measures	: Wash hands thoroughly after handling. Wash other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in original container. Keep container closed when not in use. Keep away from food, feed and drinking water. Store above 15° F (-10° C). If crystalized, warm to 80 - 90° F and redissolve by shaking container before using product.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Combustible materials.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL	DNEL	>=

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	: Liquid
Appearance	: Amber or light brown liquid.
Color	: Amber or light brown.
Odor	: Slight amine like
Odor threshold	: No data available
pH	: 4.74
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Will not flash
Flammability (solid, gas)	: Not flammable
Vapor pressure	: 25 mmHg @ 24° C
Vapor density at 20 °C	: No data available
Density	: 1.15 - 1.21 g/ml (9.60 - 10.10 lb/gl)*
Solubility	: Emulsifies
Partition Coefficient	: Log Pow - < 3.2 @ 25° C (glyphosate)
Viscosity	: 32.77 cSt @ 24° C

*Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10: Stability and reactivity

10.1. Reactivity

May react with metals such as galvanized or mild steel to produce hydrogen gas which could form a highly combustible gas mixture.

10.2. Chemical stability

Stable under normal conditions, however may decompose if heated.

10.3. Possibility of hazardous reactions

Will not undergo polymerization.

10.4. Conditions to avoid

Avoid temperatures above (115°F, 46°C) and below 25°F (-5°C).

10.5. Incompatible materials

Strong oxidizers or bases, mild and galvanized steel.

10.6. Hazardous decomposition products

Carbon monoxide, Nitrogen oxides, phosphorous oxides due to thermal breakdown.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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Glyphosate (1071-83-6)	
LD50 oral rat	4873 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 12.2 mg/l/4h (Rat)

Skin corrosion/irritation	: Not classified pH: 4.5 - 5
Serious eye damage/irritation	: Causes serious eye damage. pH: 4.5 - 5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
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 eye contact	: Causes serious eye damage. Note: No cases of irreversible eye effects could be attributed to glyphosate formulation in an extensive epidemiological survey or reported accidental eye contact with these formulations.

SECTION 12: Ecological information

12.1. Toxicity

Glyphosate (1071-83-6)	
LC50 fish 1	52 - 240 mg/l (96 h; Oncorhynchus mykiss; Soft water)
EC50 other aquatic organisms 1	3.32 mg/l (Algae)
LC50 fish 2	97 mg/l (96 h; Pimephales promelas)
TLM other aquatic organisms 1	281 mg/l (96 h; Palaemonetes sp.)
Threshold limit other aquatic organisms 1	50 mg/l (504 h; Daphnia magna)
Threshold limit algae 2	45 mg/l (72 h; Selenastrum capricornutum)

12.2. Persistence and degradability

Bonide KleenUp Weed & Grass Killer 41% Super Concentrate	
Persistence and degradability	Not established.

Glyphosate (1071-83-6)	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. No inhibition of biodegradation process in the soil. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	< 0.0057 g O ₂ /g substance
Chemical oxygen demand (COD)	0.53 g O ₂ /g substance

12.3. Bioaccumulative potential

Bonide KleenUp Weed & Grass Killer 41% Super Concentrate	
Bioaccumulative potential	Not established.

Glyphosate (1071-83-6)	
BCF fish 1	0.03 (336 h; Oncorhynchus mykiss)
BCF fish 2	0.63 (840 h; Lepomis macrochirus)
BCF other aquatic organisms 1	9.6 (840 h; Lamellibranchiata; GLP)
BCF other aquatic organisms 2	8 (672 h; Procambarus sp.)
Log Pow	-3.4 - -1.7
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

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Glyphosate (1071-83-6)

Ecology - soil

May be harmful to plant growth, blooming and fruit formation.

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

Not regulated for transport by DOT

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:

WARNING: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear safety glasses. Harmful if inhaled. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. People and pets may enter treated areas after spray has dried.

SECTION 16: Other information

Other information : None.

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.