Safety Data Sheet Date of issue: 02/21/2017 Version: 1.0

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SECTION 1: Identification	
1.1. Identification	
Product form	: Mixtures
Trade name	: Knock Out Weed & Grass Killer Super Concentrate
Synonyms	: EPA Reg. No.: 71995-7-59144
1.2. Recommended use and restrictions	-
Recommended use	: Herbicide.
Restrictions on use	: Keep out of reach of children, Do not inhale, Avoid contact with eyes, skin or clothing.
1.3. Supplier	
Gro Tec, Inc.	
P.O. Box 290 Madison, GA 30650 - United States www.pennington.com	
1.4. Emergency telephone number	
Emergency number	: 1-800-424-9300 - CHEMTREC - Transportation and Non-Transportation related emergencies 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or n	nixture
GHS-US classification	
Acute toxicity (inhalation:dust,mist) Category 4 Serious eye damage/eye irritation Category 2 Carcinogenicity Category 1B	Harmful if inhaled Causes serious eye irritation May cause cancer
2.2. GHS Label elements, including pred	cautionary statements
GHS-US labeling	
Hazard pictograms (GHS-US)	GHS07 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: Causes serious eye irritation Harmful if inhaled May cause cancer
Precautionary statements (GHS-US)	 Obtain special instructions before use Do not handle until all safety precautions have been read and understood Avoid breathing dust/fume/gas/mist/vapors/spray Wash hands, forearms and face thoroughly after handling Use only outdoors or in a well-ventilated area Wear protective gloves/protective clothing/eye protection/face protection If inhaled: Remove person to fresh air and keep comfortable for breathing If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If exposed or concerned: Get medical advice/attention Call a doctor, a POISON CENTER if you feel unwell If eye irritation persists: Get medical advice/attention Store locked up Dispose of contents/container to in accordance with local/regional/national/international regulations.
2.3. Other hazards which do not result i	in classification
	: Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this

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2.4. Unknown acute toxicity (GHS U	S)		
Not applicable			
SECTION 3: Composition/Inform	ation on ingredients		
3.1. Substances			
Not applicable			
3.2. Mixtures			
Name		Product identifier	%
Isopropylamine salt of glyphosate		(CAS No) 38641-94-0	41
Other ingredients		(CAS No) N/A	59
SECTION 4: First-aid measures			
4.1. Description of first aid measure	S		
First-aid measures general	: IF exposed or concerned: Get medical feel unwell.	advice/attention. Call a poison center of	or a doctor if you
First-aid measures after inhalation	: Remove person to fresh air and keep c doctor if you feel unwell.	omfortable for breathing. Call a poison	center or a
First-aid measures after skin contact	: If skin irritation occurs: Get medical adv	vice/attention. Wash skin with plenty of	water.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Continue rinsing. Get medical advice/a		
First-aid measures after ingestion	 Rinse mouth. Call a POISON CENTER vomiting unless directed to do so by me feel unwell. 		
4.2. Most important symptoms and	effects (acute and delayed)		
Symptoms/injuries	: Harmful if inhaled. Causes serious eye	irritation. May cause cancer.	
4.3. Immediate medical attention an	d special treatment, if necessary		
Treat symptomatically.			
SECTION 5: Fire-fighting measur	'es		
5.1. Suitable (and unsuitable) exting			
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbo	on dioxide.	
5.2. Specific hazards arising from the Reactivity	: Reacts with galvanized steel or unlined	mild steel to produce bydrogen, a high	ly flammable gas
	that could explode.	mild steer to produce Hydrogen, a high	ny naminable gas
5.3. Special protective equipment a			
Protection during firefighting	: Do not attempt to take action without su apparatus. Complete protective clothing		ained breathing
SECTION 6: Accidental release n			
6.1. Personal precautions, protectiv	e equipment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Only qualified personnel equipped with breathing dust/fume/gas/mist/vapors/sp		ervene. Avoid
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without so refer to section 8: "Exposure controls/p		er information
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for conta	inment and cleaning up		
Methods for cleaning up	: Take up liquid spill into absorbent mate	rial.	
Other information	: Dispose of materials or solid residues a		

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7.1. Precautions for safe hand	<i>lling</i>
Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe stora	ge, including any incompatibilities
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool. Protect from sunlight. Keep from freezing. Store in original container.
Incompatible materials	: Galvanized steel. Mild steel.

Isopropylamine salt of glyphosate (38641-94-0)	
Not applicable	
Other ingredients (N/A)	
Not applicable	

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station. : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear chemically resistant protective gloves.

Eye protection:

Chemical goggles or safety glasses.

Skin and body protection:

If prolonged exposure is anticipated, it is recommented for handlers to wear appropriate clothing to prevent skin contact.

Respiratory protection:

Wear suitable respiratory equipment in case of insufficient ventilation



SECTION 9: Physical an		
9.1. Information on basic	physical and chemical properties	
Physical state	: Liquid	
Appearance	: Amber - brown liquid.	
Color	: amber, brown	
Ddor	: No data available	
Odor threshold	: No data available	
рН	: 4.7	
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Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Does not flash
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No significant volatility; aqueous soluation
Relative vapor density at 20 °C	: No data available
Relative density	: 1.1655
Solubility	: Soluble in water.
Log Pow	: < -3.2 @25 deg. C (glyphosate)
Auto-ignition temperature	: 443 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

10.2.	Chemical stability		
Stable u	table under normal conditions.		
10.3.	Possibility of hazardous reactions		
No dang	perous reactions known under normal conditions of use.		

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Mild steel. Galvanized steel.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Inhalation:dust,mist: Harmful if inhaled.

Knock Out Weed & Grass Killer Super Concentrate	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	1.6 Male rat
Skin corrosion/irritation	: Not classified pH: 4.7
Serious eye damage/irritation	Causes serious eye irritation. pH: 4.7
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Isopropylamine salt of glyphosate (38641-9	4-0)
IARC group	2A - Probably Carcinogenic to Humans

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Isopropylamine salt of glyphosate (38641-94-0)	
In OSHA Hazard Communication Carcinogen list	Yes
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
SECTION 12: Ecological information	

12.1. Toxicity	
Isopropylamine salt of glyphosate (38641-94-	-0)
LC50 fish 1	24 mg/l Bluegill sunfish (Lepomis macrochirus) 96 hours
EC50 Daphnia 1	160 mg/l Water flea (Daphnia magna) 48 hours
LC50 fish 2	42 mg/l Rainbow trout (Oncorhynchus mykiss) 96 hours

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Knock Out Weed & Grass Killer Super Concentrate	
Log Pow	< -3.2 @25 deg. C (glyphosate)

12.4. Mobility in soil

Knock Out Weed & Grass Killer Super Concentrate	
Mobility in soil	Adsorbs strongly to soil.

SECTION 13: Disposal consideration	1S
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Avoid release to the environment. Dispose of contents/container to local/regional/national/international regulations.
Additional information	: See product label for additional disposal information.
SECTION 14: Transport information	

Department of Transportation (DOT)

In accordance with DOT Not regulated

Transport by sea Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Other ingredients (N/A)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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FIFRA Labelling	
EPA Registration Number	71995-7-59144
requirements under federal pesticide law. These data sheets (SDS), and for workplace labels of r	y the United States Environmental Protection Agency and is subject to certain labeling e requirements differ from the classification criteria and hazard information required for safety ion-pesticide chemicals. The hazard information required on the pesticide label is reproduced inportant information, including directions for use.
FIFRA Signal Word	Warning
FIFRA Hazard Statement	KEEP OUT OF REACH OF CHILDREN.
FIFRA Hazards to Humans and Domestic Animals	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.
FIFRA First Aid	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.
FIFRA Environmental Hazards	To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street back onto the treated area of the lawn or garden will help to prevent runoff to water bodies or drainage systems.
FIFRA Physical Hazard	Spray solutions of this product may be mixed, stored and applied using stainless steel, fiberglass, plastic or plastic-lined steel containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS.

15.2. US State regulations

No additional information available

SECTION 16: Other information

Date of issue

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SDS US (GHS HazCom 2012) - CGP

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