

Issue Date: 14-Sep-06

Revision Date: 11-Jun-15

Version 2

1. IDENTIFICATION

Product Identifier

Product Name United 85 WEED AND BRUSH KILLER

Other means of identification

SDS # UNITED-85

Recommended use of the chemical and restrictions on use

Recommended Use Non-selective persistent herbicide for use where control of all vegetation is desired soil sterilant.

Use Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet

Supplier Address

United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca

Emergency Telephone Number

Company Phone Number 800-323-2594 (to reorder)
Emergency Telephone (24 hr) INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

Appearance Reddish brown liquid

Physical State Liquid

Odor Fuel oil scent

Signal Word

Danger

Hazard Statements

Combustible liquid.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure.



Precautionary Statements - Prevention

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Keep away from open flames, sparks, heat. – No smoking
 Do not breathe vapors, mist, fume.
 Wash thoroughly after handling.
 Wear protective clothing, eye protection, protective gloves.

Precautionary Statements - Response

IF SWALLOWED: Immediately call a poison center or doctor.
 IF ON SKIN: Wash with plenty of water.
 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.
 Get medical advice/attention if you feel unwell.
 Specific treatment (See First aid measures on this label).
 Do not induce vomiting.
 If skin irritation occurs, Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Take off contaminated clothing and wash before reuse.
 In case of fire: Use dry extinguishing powder, carbon dioxide (CO₂), alcohol resistant foam to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.
 Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to comply with local/regional/national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	Product identifier	%	Classification (GHS-US)
Fuel oil, No 4, Gasoil – unspecified, distillate oil having a minimum viscosity of 45 SUS at 37.7°C (100°F).]	(CAS No) 68476-31-3	60 - 100	Asp. Tox. 1, H304
Glycol Ether EB	(CAS No) 111-76-2	10 - 30	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT RE 2, H373 Asp. Tox. 1, H304
2-ethylhexyl 2,4-dichlorophenoxyacetate	(CAS No) 1928-43-4	0.5 – 1.5	Acute Tox. 4 (Oral), H302
Bromacil	(CAS No) 314-40-9	0.1 – 1	Eye Irrit. 2A, H319
Naphthalene	(CAS No) 91-20-3	0 – 0.25	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Carc. 1B, H350 Aquatic Acute 1, H400

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures**General Advice**

If you feel unwell, seek medical advice (show the label where possible). If exposed or concerned: Get medical advice/attention.

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: get medical advice/attention.
Skin Contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by a warm water rinse. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Consult a doctor/medical service.
Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Ingestion	Do not induce vomiting. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms	If you feel unwell, seek medical advice. May cause cancer. May cause damage to organs through prolonged or repeated exposure.
Symptoms after inhalation	Harmful if inhaled. Exposure to high concentrations: central nervous system depression. Irritation of the respiratory tract. Headache. May cause drowsiness or dizziness.
Symptoms after skin contact	Causes skin irritation.
Symptoms after eye contact	Causes serious eye irritation.
Symptoms after ingestion	May be fatal if swallowed and enters airways.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Dry chemical powder. Carbon dioxide. Alcohol-resistant foam.

Unsuitable Extinguishing Media Do not use a heavy water stream.

Fire Hazard

Combustible liquid.

Explosion Hazard

Explosion risk in case of fire. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May be ignited by sparks. May form flammable/explosive vapor-air mixture.

Reactivity

On burning: release of toxic and corrosive gases/vapors (nitrous vapors, Sulphur oxides, carbon monoxide – carbon dioxide). If the product is involved in a fire, it can release toxic chlorine gases. Reacts violently with (strong) oxidizers.

Firefighting Instructions

Exercise caution when fighting any chemical fire. In case of fire: evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

Protection During Firefighting

Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

General Measures	Remove ignition sources. Use special care to avoid static electric charges.
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Protective Equipment	For non-emergency personnel: Protective goggles. Gloves. Protective clothing. For emergency responders: Equip cleanup crew with proper protection.
Emergency Procedures	For non-emergency personnel: Evacuate unnecessary personnel. No naked flames or sparks. For emergency responders: Stop leak if safe to do so. Stop release. Ventilate area.

Methods and material for containment and cleaning up

Methods for Containment	Contain released substance, pump into suitable containers.
Methods for Clean-Up	This material and its container must be disposed of in a safe way, and as per local legislation. Take up liquid spill into inert absorbent material, e.g.: sand/earth. Clean contaminated surfaces with a soap solution.

7. HANDLING AND STORAGE**Precautions for safe handling**

Additional hazards when processed	Handle empty containers with care because residual vapors are flammable. Keep away from open flame, sparks, excessive heat. – No smoking.
Precautions for safe handling	Comply with legal requirements. Do not handle until all safety precautions have been read and understood. Do not breathe vapors. Use personnel protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care. Keep away from sources of ignition – No smoking. Take precautions against electrostatic charges. Obtain special instructions before reuse. Remove contaminated clothing immediately.
Hygiene measures	Wash thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Technical measures	Comply with applicable regulations. Proper grounding procedure to avoid static electricity should be followed.
Storage conditions	Keep only in the original container in a cool, well ventilated place away from: sparks, open flames, excessive heat. Keep container tightly closed.
Incompatible products	Oxidizing agent.
Incompatible materials	Sources of ignition.
Heat-ignition	Keep substance away from ignition sources and heat sources.
Prohibitions on mixed storage	Keep substance away from oxidizing agents.
Storage area	Store away from heat. Store in a cool area. Store in a dry area. Store in a well-ventilated place. Keep locked up.
Special rules on packaging	Keep only in original container. Meet the legal requirements.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control Parameters**

Bromacil (314-40-9)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
Naphthalene (91-20-3)		
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	ACGIH STEL (ppm)	10 ppm

Individual protection measures, such as personal protective equipment

Personal Protective Equipment Use appropriate protective equipment when risk assessment indicates this is necessary. Gloves. Protective clothing. Protective goggles. Safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Fuel oil odor
Appearance	Clear, reddish brown liquid	Odor Threshold	No data available
Color	Red		
Property	Values	Remarks • Method	
pH	No data available	1	
Melting Point /Freezing Point	No data available	Not determined	
Boiling Point	No data available	83 °C / 183 °F	
Flash Point	145°F	None	
Evaporation Rate	No data available		
Flammability (Solid, Gas)	No data available	Liquid-Not applicable	
Vapor Pressure	No data available	Not determined	
Vapor Density	No data available	>1	
Specific Gravity	0.875 g/ml		
Water Solubility	Insoluble		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	No data available	Not determined	
Decomposition Temperature	No data available	Not determined	
Kinematic Viscosity	< 20 cSt		
Dynamic Viscosity	No data available	Not determined	
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		
VOC Content	>90%		

10. STABILITY AND REACTIVITY

Reactivity

On burning: release of toxic and corrosive gases/vapors (nitrous vapors, sulphur oxides, carbon monoxide – carbon dioxide). If the product is involved in a fire, it can release toxic chlorine gases. Reacts violently with (strong) oxidizers.

Chemical Stability

Combustible liquid. Stable under normal conditions. Risk of explosion if heated under confinement. Heating may cause a fire or explosion.

Possibility of Hazardous Reactions

Refer to Reactivity listed above.

Conditions to Avoid

Open flame. Overheating. Sparks.

Incompatible Materials

Oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition products: CO, CO2, Oxides of nitrogen and other potentially toxic fumes.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : Not classified

Bromacil (314-40-9)	
LD50 oral rat	5200 mg/kg (Rat)
LD50 dermal rat	>2500 mg/kg (Rat)
LD50 dermal rabbit	>5000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	>4.8 mg/l/4h (Rat)
ATE CLP (oral)	5200.000 mg/kg body weight
Naphthalene (91-20-3)	
LD50 oral rat	>1100 mg/kg (Rat)
LD50 dermal rat	>2500 mg/kg (Rat)
LD50 dermal rabbit	>20000 mg/kg (Rabbit)
ATE CLP (oral)	500.000 mg/kg body weight
Glycol Ether EB (111-76-2)	
LD50 oral rat	1300 mg/kg
LD50 dermal rat	>2000 mg/kg
ATE CLP (oral)	1300.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (dust, mist)	1.500 mg/l/4h
2-ethylhexyl 2,4-dichlorophenoxyacetate (1928-43-4)	
LD50 oral rat	896 mg/kg (Rat)
LD50 dermal rat	>2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	>5.4 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
 Serious eye damage/irritation : Causes serious eye irritation.
 Respiratory or skin sensitization : Not classified.
 Germ cell mutagenicity : Not classified.
 Carcinogenicity : May cause cancer.

Naphthalene (91-20-3)	
IARC group	2B – Possibly Carcinogenic to Humans
National Toxicology Program (NTP) Status	3 – Reasonably
Glycol Ether EB (111-76-2)	
IARC group	3 – Not classifiable

Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : Not classified
 Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure

Glycol Ether EB (111-76-2)	
LOAEL (oral, rat, 90 days)	69 mg/kg bodyweight/day Target organ: liver
NOAEL (dermal, rat/rabbit, 90 days)	150 mg/kg bodyweight/day

Aspiration hazard : May be fatal if swallowed and enters airways
 Symptoms/injuries after inhalation : Harmful if inhaled. Exposure to high concentrations: Central nervous system depression. Irritation of the respiratory tract. Headaches. May cause drowsiness or dizziness.
 Symptoms/injuries after skin contact : Causes skin irritation
 Symptoms after eye contact : Causes serious eye irritation
 Symptoms after ingestion : May be fatal if swallowed and enters airways
 Likely routes of exposure : Skin and eyes contact, ingestion, inhalation

12. ECOLOGICAL INFORMATION

Persistence/Degradability

Bromacil (314-40-9)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Photo degradation in the air.
Naphthalene (91-20-3)	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Absorbs into the soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0g O/g substance
Chemical oxygen demand (COD)	0.22 g O/g substance
ThOD	2.99 g O/g substance

Bioaccumulative potential

Bromacil (314-40-9)	
Log Pow	2.11
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500)
Naphthalene (91-20-3)	
Log Pow	3.30 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500)
2-ethylhexyl 2, 4-dichlorophenoxyacetate (1928-43-4)	
Log Pow	5.78 (Experimental value)

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

- Disposal of Wastes** Dispose of contents/container to comply with local/regional/national regulations.
- Contaminated Packaging** Clean up even minor leaks or spills if possible without unnecessary risk. Handle empty containers with care because residual vapors are flammable.

14. TRANSPORT INFORMATION

- Note** According to 49 CFR 173, 150 (f) (1), this material should be reclassified as "NA 1993, Combustible liquid, n.o.s" if it is shipping in bulk > 119 gallons.
- DOT** Not regulated.
- IATA** Please contact manufacturer for most current information.
- IMDG** Please contact manufacturer for most current information.
Marine pollutant: Yes

15. REGULATORY INFORMATION

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TCSA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Bromacil	CAS No 314-40-9	0.1 – 1
Naphthalene	CAS No 91-20-3	0 – 0.25
2-ethylhexyl 2,4-dichlorophenoxyacetate	CAS No 1928-43-4	0.5 – 1.5
Glycol Ether EB	CAS No 111-76-2	10 - 30

Bromacil (314-40)	
Listed on SARA Section 313 (Specific toxic chemical listings)	

Naphthalene (91-20-3)	
Listed on SARA section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb

2-ethylhexyl 2,4-dichlorophenoxyacetate (1928-43-4)	
Listed on SARA Section 313 (Specific toxic chemical listings)	

FIFRA Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling 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: Harmful if absorbed through the skin. Avoid contact with skin, eyes or clothing.

California Proposition 65 – This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Training advice: Normal use of this product shall imply use in accordance with the instructions on the packaging.

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	2	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	2	0	B

Issue Date: 14-Sept-06
 Revision Date: 11-Jun-15
 Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet