

Issue Date: 11-Jun-15

Revision Date: 03-Sept-21

Version 3

## 1. PRODUCT AND COMPANY 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

### 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

### Classification of the substance or mixture

Flammable Liquid	Category 4
Acute Toxicity (Dermal)	Category 4
Acute Toxicity (Inhalation:dust,mist)	Category 4
Skin irritation	Category 2
Eye irritation	Category 2
Carcinogenicity	Category 1B
STOT SE	Category 3
STOT RE	Category 2
Aspiration Toxicity	Category 1

### Signal Word

**Danger**

### Hazard Statements

Combustible liquid. May be fatal if swallowed and enters airways. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause drowsiness and dizziness. May cause cancer. May cause damage to organs (liver, thymus, bone marrow) 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 or other ignition source – No smoking. Do not breathe vapors, mist, fume. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. 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 INHALED: Remove person to fresh air and keep comfortable for breathing.

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 (CO<sub>2</sub>), alcohol resistant foam to extinguish.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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)
Petroleum Solvent	(CAS No) 68476-34-6	60 - 100	Asp. Tox. 1, H304 Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4(Inhalation)H332 Acute Tox.4(Inhalation: dust,mist) H332 Skin Irrit. 2, H315 Carc. 2, H351 STOT SE, 3 H336 STOT RE 2, H373 Asp. Tox. 1, H304
2-butoxyethanol;ethyleneglycol monobutyl ether; butyl cellosolve	(CAS No) 111-76-2	10 - 30	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox.4(Inhalation: dust, mist) H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
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	0.5 – 1.5	Eye Irrit. 2A, H319
Naphthalene	(CAS No) 91-20-3	0.1 - 1	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. All hazardous chemicals, as determined by 29CFR 1910.1200 have been listed.\*\*

### 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.

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	Do not induce vomiting. Immediately call a poison center or doctor/physician.

**Most important symptoms and effects**

<b>Symptoms</b>	If you feel unwell, seek medical advice. May cause cancer. May cause damage to organs (liver, thymus, bone marrow) through prolonged or repeated exposure.
<b>Symptoms after inhalation</b>	Harmful if inhaled. May cause drowsiness or dizziness.
<b>Symptoms after skin contact</b>	Causes skin irritation. Harmful if contact with skin.
<b>Symptoms after eye contact</b>	Causes serious eye irritation.
<b>Symptoms after ingestion</b>	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**

Solid water jet ineffective as extinguishing medium.

**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**

<b>General Measures</b>	Remove ignition sources. Use special care to avoid static electric charges.
<b>Protective Equipment</b>	For non-emergency personnel: Protective goggles. Gloves. Protective clothing.
<b>Emergency Procedures</b>	For emergency responders: Equip cleanup crew with proper protection. For non-emergency personnel: Evacuate unnecessary personnel. No naked flames or sparks.
<b>Environmental Precautions</b>	For emergency responders: Stop leak if safe to do so. Stop release. Ventilate area. Avoid release to the environment. Prevent entry into sewers and public waters.

**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Contain released substance, pump into suitable containers.
<b>Methods for Clean-Up</b>	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**

<b>Additional hazards when processed</b>	Handle empty containers with care because residual vapors are flammable. Keep away from open flame, sparks, excessive heat. – No smoking.
<b>Precautions for safe handling</b>	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.
<b>Hygiene measures</b>	Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Conditions for safe storage, including any incompatibilities**

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

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

<b>Bromacil (314-40-9)</b>		
ACGIH	ACGIH OEL TWA	10 mg/m <sup>3</sup>
<b>Naphthalene (91-20-3)</b>		
ACGIH	ACGIH OEL TWA (ppm)	10 ppm
ACGIH	Remark (ACGIH)	Hematologic eff; URT & eye irr; Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure)
OSHA	OSHA PEL TWA [1]	50 mg/m <sup>3</sup>
OSHA	OSHA PEL TWA [2]	10 ppm

2-ethylhexyl 2,4-dichlorophenoxyacetate (1928-43-4) – Not Applicable

Petroleum Solvent (68476-34-6) – Not Applicable

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve (111-76-2): ACGIH OEL TWA [ppm] 20ppm. ACGIH-Remark; Eye & UTR irr, OSHA OEL TWA [1]; 240 mg/m<sup>3</sup> OSHA PEL TWA[2] 50 ppm

**Individual protection measures, such as personal protective equipment**

**Exposure controls**

Appropriate Engineering Controls

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

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**

<b>Physical State</b>	Liquid		
<b>Appearance</b>	Clear, reddish brown liquid	<b>Odor</b>	Fuel oil odor
<b>Color</b>	Red	<b>Odor Threshold</b>	No data available
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	No data available	1	
<b>Melting Point /Freezing Point</b>	No data available	Not determined	
<b>Boiling Point</b>	No data available	83 °C / 183 °F	
<b>Flash Point</b>	145°F	None	
<b>Evaporation Rate</b>	No data available		
<b>Flammability (Solid, Gas)</b>	No data available	Liquid-Not applicable	
<b>Vapor Pressure</b>	No data available	Not determined	
<b>Vapor Density</b>	No data available	>1	
<b>Density</b>	0.875 g/ml		
<b>Water Solubility</b>	Insoluble		
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition Temperature</b>	No data available	Not determined	
<b>Decomposition Temperature</b>	No data available	Not determined	
<b>Kinematic Viscosity</b>	< 20 cSt		
<b>Dynamic Viscosity</b>	No data available	Not determined	
<b>Explosive Properties</b>	Heat may cause a fire or explosion		
<b>Oxidizing Properties</b>	Not determined		
<b>VOC Content</b>	>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. Refer to Section 10 of this SDS.

### Incompatible Materials

Oxidizing agents.

### Hazardous Decomposition Products

Thermal decomposition products: CO, CO<sub>2</sub>, Oxides of nitrogen and other potentially toxic fumes.

## 11. TOXICOLOGICAL INFORMATION

<b>Bromacil (314-40-9)</b>	
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 mg/kg bodyweight
<b>Naphthalene (91-20-3)</b>	
LD50 dermal - rat	>16000 mg/kg bodyweight
LD50 inhalation - rat	>0.4 mg/l Inhalation (vapors), 14 day(s)
ATE CLP (oral)	500 mg/kg bodyweight
<b>2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve (111-76-2)</b>	
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapors)	11 mg/l/4h
ATE CLP (dust, mist)	1.5 mg/l/4h
<b>2-ethylhexyl 2,4-dichlorophenoxyacetate (1928-43-4)</b>	
LD50 oral rat	896 mg/kg (Rat)
LD50 dermal rat	>2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	>5.4 mg/l/4h
ATE CLP (oral)	896 mg/kg bodyweight
<b>Petroleum Solvent (68476-34-6)</b>	
LD50 oral – rat	>7600 mg/kg
LD50 dermal – rat	>4300 mg/kg
LC50 inhalation – rat	4.1 mg/l

Acute toxicity	: Not classified
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.

<b>Naphthalene (91-20-3)</b>	
IARC group	2B – Possibly Carcinogenic to humans
National Toxicology Program (NTP) Status	3 – Reasonably anticipated to be Human Carcinogen
<b>2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve (111-76-2)</b>	
IARC group	3 – Not classifiable

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure. (liver, thymus, bone marrow)
Aspiration hazard	: May be fatal if swallowed and enters airways
Symptoms/injuries after inhalation	: Harmful if inhaled. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation. Harmful if contact with skin
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

<b>Bromacil (314-40-9)</b>	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.
<b>Naphthalene (91-20-3)</b>	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.22 g O <sub>2</sub> /g substance
ThOD	2.99 g O <sub>2</sub> /g substance

### Bioaccumulative potential

<b>Bromacil (314-40-9)</b>	
Log Pow	2.11
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500)
<b>Naphthalene (91-20-3)</b>	
Log Pow	3.4 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake flask method, 25°C
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500)
<b>2-ethylhexyl 2, 4-dichlorophenoxyacetate (1928-43-4)</b>	
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**

**Transport document description** When transported by ground in non-bulk containers, this product utilizes the exception found under 49 CFR 173.150. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may be required.

**DOT**  
**UN/ID No.** NA1993 Combustible liquid, n.o.s. (Aliphatic Hydrocarbon)  
**Proper shipping name** Combustible liquid, n.o.s.  
**Transport hazard classes(es)** 3- Class 3 – Flammable and combustible liquid 49 CFR 173.120  
**Packing group** III – Minor Danger  
**Packaging in non-bulk (49 CFR 173.xxx)** 203  
**Packaging bulk (49 CFR 173.xxx)** 241  
**DOT Symbols** D – Proper shipping name for domestic use only, or to and from Canada, G – Identifies PSN requiring a technical name  
**Special provisions (49 CFR 172.102)** IB3, T1, T4, TP1  
**Packaging exceptions (49 CFR 173.xxx)** 150  
**Quantity Limitations Passenger aircraft- Rail (49 CFR 173.27)** 60 L  
**Quantity Limitations Cargo aircraft only (49 CFR 175.75)** 220 L  
**Vessel Stowage Location** A  
**ERG** 128

**IDMG** No information available

**IATA** No information available

**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	0.5 – 1.5%
Naphthalene	CAS No 91-20-3	0.1 – 1%
Benzene	CAS No 71-43-2	<0.1%
2-ethylhexyl 2,4-dichlorophenoxyacetate	CAS No 1928-43-4	0.5 – 1.5
Xylene	CAS No 1330-20-7	0.1 – 1%
1,2,4-trimethylbenzene	CAS No 95-63-6	0.1 – 1%
Biphenyl;diphenyl	CAS No 92-52-4	0.1 – 1%
2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve	CAS No 111-76-2	10 – 30%

**EPA Registration Number: 10088-68.** 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, eyes or clothing.

This product can expose you to benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).



CERCLA RQ (Reportable quantity,100lb.)	Napthalene (91-20-3). Xylene (1330-20-7). Biphenyl;diphenyl (92-52-4)
CERCLA RQ (Reportable quantity, 10 lb.)	Benzene (71-43-2)

**16. OTHER INFORMATION**

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

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

**Issue Date:** 11-Jun-15  
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**Revision Note:** Updated Sections 2/3/6/11 and 15

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**