

# Safety Data Sheet

Issue Date: 11-Jun-2018

Revision Date: 13-Apr-2020

Version 3

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Gharda Diuron 4L Herbicide

### Other means of identification

**SDS #** GCI-031

**Registration Number(s)** EPA Reg. No. 93182-27  
**UN/ID No** UN3082

### Recommended use of the chemical and restrictions on use

**Recommended Use** Formulated Agricultural Use Product. Refer to product label for further details.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

GHARDA CHEMICALS INTERNATIONAL INC.  
760 Newtown-Yardley Road  
Suite 110  
Newtown, PA USA 18940  
Website: www.ghardausa.com  
For further information contact: 1 (215) 968-9474

### Emergency Telephone Number

**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Emergency Overview** This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

**Appearance** Light beige suspension      **Physical state** Suspension Concentrate      **Odor** Slight

### Classification

Acute toxicity - Oral	Category 4
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

### Signal Word

**Warning**

### Hazard statements

Harmful if swallowed  
Suspected of causing 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  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards**

Very toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Diuron	330-54-1	40

\*\*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**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.
<b>Skin Contact</b>	Take off contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects**

**Symptoms** Harmful if swallowed. Irritation to skin and eyes.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

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

Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray (fog).

**Unsuitable Extinguishing Media** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific Hazards Arising from the Chemical**

Non-combustible. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

**Hazardous Combustion Products** Fumes and irritating gases. Carbon oxides. Nitrogen oxides (NO<sub>x</sub>). Halogenated compounds. Smoke.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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

**Personal Precautions** Slipping hazard; do not walk through spilled material. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate affected area. Wear protective clothing as described in Section 8 of this safety data sheet. Refer to Section 7, Handling, for additional precautionary measures.

**Environmental precautions**

**Environmental precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

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

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Absorb with inert material or sweep up, and then place in suitable container for chemical waste. For waste disposal, see section 13 of the SDS.

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

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray.

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

- Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep only in original container. Keep container closed when not in use. Protect from excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.
- Incompatible Materials** Strong acids. Strong bases. Strong oxidizers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Diuron 330-54-1	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>

Appropriate engineering controls

- Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Wear safety glasses with side shields or chemical splash goggles to prevent vapors or mists from entering the eyes. If using a full face shield, always use safety glasses or goggles along with the face shield to ensure adequate protection of the eyes.
- Skin and Body Protection** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly. Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber ("nitrile" or "NBR") or Polyvinyl chloride ("PVC" or "vinyl").
- Respiratory Protection** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. When handling in enclosed areas, when large quantities of mists are generated or prolonged exposure is possible in excess of the TLV, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

<b>Physical state</b>	Suspension Concentrate	<b>Odor</b>	Slight
<b>Appearance</b>	Light beige suspension	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Light beige		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	5-8.5 (5% emulsion)	@ 20°C (68°F)	
<b>Melting point / freezing point</b>	Not determined		
<b>Boiling Point / Boiling Range</b>	Not determined		
<b>Flash Point</b>	> 93.3 °C / 200 °F		
<b>Evaporation Rate</b>	Not determined		
<b>Flammability (Solid, Gas)</b>	Not determined		

<b>Flammability Limit in Air</b>	
Upper Flammability Limit	Not determined
Lower Flammability Limit	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Water Solubility	Dispersible
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	550-650 cp
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

**Other Information**

**Bulk Density** 1.18 g/cc

## 10. STABILITY AND REACTIVITY

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid**

Keep out of reach of children.

**Incompatible Materials**

Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products**

Carbon oxides. Nitrogen oxides (NOx). Ammonia. Halogenated compounds.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

**Eye Contact** Minimally irritating to the eyes.

**Skin Contact** Slightly irritating to the skin.

**Inhalation** Avoid inhalation.

**Ingestion** Harmful if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Diuron 330-54-1	= 1017 mg/kg ( Rat ) = 4990 mg/kg ( Rat )	> 5 g/kg ( Rat ) > 2000 mg/kg ( Rat )	> 0.265 mg/L ( Rat )
Propylene Glycol 57-55-6	= 20 g/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
Ethoxylated Polyoxypropylene 9003-11-6	= 5700 mg/kg ( Rat ) = 16 g/kg ( Rat )	-	= 320 mg/m <sup>3</sup> ( Rat ) 4 h

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Suspected of causing cancer. None of the components of Diuron 4L are listed by IARC, NTP or OSHA as carcinogenic.

**Reproductive toxicity** Animal testing did not show any effects on fertility, showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 1,200.80 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Diuron 330-54-1	0.022: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 0.036: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 static 0.1: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 0.0007: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static	4: 96 h <i>Lepomis macrochirus</i> mg/L LC50 1.5 - 2.54: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 13.4 - 15: 96 h <i>Pimephales promelas</i> mg/L LC50 static 2.3 - 3.3: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 14.7: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 13.4 - 15: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 2.9: 96 h <i>Cyprinus carpio</i> mg/L LC50	6.3 - 13: 48 h <i>Daphnia magna</i> mg/L EC50 Static 1.4: 48 h <i>Daphnia magna</i> mg/L EC50
Propylene Glycol 57-55-6	19000: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	710: 96 h <i>Pimephales promelas</i> mg/L LC50 51600: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 51400: 96 h <i>Pimephales promelas</i> mg/L LC50 static 41 - 47: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static	1000: 48 h <i>Daphnia magna</i> mg/L EC50 Static 10000: 24 h <i>Daphnia magna</i> mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Diuron 330-54-1	2.82

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION****Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

	Packaging <25 gallons: Not regulated
	Packaging >25 gallons: Regulated
<b>UN/ID No</b>	UN3082
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s. (Diuron)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Reportable Quantity (RQ)</b>	100lbs
<b>Marine Pollutant</b>	Yes.
<b>Emergency Response Guide Number</b>	171

**IATA**

<b>UN/ID No</b>	UN3082
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s. (Diuron)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes

**IMDG**

<b>UN/ID No</b>	UN3082
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s. (Diuron)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes

## 15. REGULATORY INFORMATION

### International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Diuron	X	X	X	X	X	X	X	X
Propylene Glycol	X	X	X	X	X	X	X	X
Ethoxylated polyarylphenol sulfate, ammonium salt	X	X						
Ethoxylated Polyoxypropylene	X	X		X	X	X	X	X
Tristyrylphenyl ether phosphate, TEA salt	X				X	X	X	X
Fullers earth	X	X			X	X	X	X
Xanthan gum	X	X	X	X	X	X	X	X

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Diuron 330-54-1	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Diuron - 330-54-1	330-54-1	40	1.0

### CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Diuron	100 lb			X

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Diuron - 330-54-1	Carcinogen



**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Diuron 330-54-1	X	X	X
Propylene Glycol 57-55-6	X		X

**EPA Pesticide Registration Number** EPA Reg. No. 93182-27

**EPA Statement**

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:

**EPA Pesticide Label**

CAUTION

**Difference between SDS and EPA pesticide label**

Signal Word	EPA-Caution	OSHA-Warning
Acute toxicity - Oral	N/A	Harmful if swallowed
Specific target organ toxicity (repeated exposure)	N/A	May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	N/A	Suspected of causing cancer

**16. OTHER INFORMATION****NFPA****Health Hazards**

2

**Flammability**

1

**Instability**

0

**Special Hazards**

Not determined

**HMIS****Health Hazards**

Not determined

**Flammability**

Not determined

**Physical hazards**

Not determined

**Personal Protection**

Not determined

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**Revision Note:**

Updated information

**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 a 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**