# Safety Data Sheet

UPL

Preparation Date 31-Jan-2020 Revision date 18-Mar-2022 **Revision Number: 2** 1. Identification of the Substance/Preparation and of the Company/Undertaking Identification of the product Product Description Adios Other means of identification Internal SDS code 12-0483 Registration number(s) 70506-483 Recommended use of the chemical and restrictions on use **Recommended use** Defoliant. Uses advised against Activities contrary to label recommendation Non labeled activities Details of the Supplier of the Safety Data Sheet Supplier Address UPL NA Inc. 630 Freedom Business Center Suite 402 King of Prussia, PA 19406 Emergency telephone number **Company Phone Number** 1-800-438-6071 Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887 **Emergency telephone number** Medical: Rocky Mountain Poison and Drug Safety (866) 673-6671 (24hrs) 2. Hazards Identification

#### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label elements

#### **EMERGENCY OVERVIEW**

# WARNING

# Hazard Statements

MAY BE HARMFUL IF SWALLOWED Toxic to aquatic life with long lasting effects Suspected of causing cancer



Physical state Liquid

Odor Faint

#### **Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood Do not breathe dust/fume/gas/mist/vapors/spray Wash hands thoroughly after handling Contaminated work clothing should not be allowed out of the workplace Avoid release to the environment Wear protective gloves/protective clothing/eye protection/face protection

#### **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

# Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

Toxic to aquatic life with long lasting effects

# 3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Thidiazuron	51707-55-2	12
Diuron	330-54-1	6

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

# 4. First aid measures

### FIRST AID MEASURES

Eye contact	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.			
Skin contact	Wash skin with soap and water. Seek medical attention if skin irritation, swelling or redness develops and persists. Remove and wash contaminated clothing before re-use.			
Inhalation	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.			
Ingestion	Call a physician or poison control center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.			
Most Important Symptoms and Effe	ects, Both Acute and Delayed			
Most Important Symptoms and MAY CAUSE ALLERGIC SKIN REACTION. Effects				
Indication of Any Immediate Medical Attention and Special Treatment Needed				
Notes to physician	Treat symptomatically.			
5. Fire-fighting measures				

#### Suitable extinguishing media

Carbon dioxide (CO2), Dry powder, Foam, Water fog. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. If using water or foam, prevent product and runoff from entering drains, sewers or surface water due to high toxicity to aquatic organisms.

Unsuitable extinguishing media Water spray.

<u>Specific hazards arising from the chemical</u> Thermal decomposition can lead to release of irritating and toxic gases and vapors. Dusts or fumes may form explosive mixtures in air.

# Explosion data

# 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
Environmental Precautions				
Environmental precautions	Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbance such as clay, sand or soil.			
Methods and material for conta	inment and cleaning up			
Methods for Clean-Up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.			
	7. Handling and Storage			
Precautions for safe handling				
Handling	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Use only in well-ventilated areas. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.			
Conditions for safe storage, inc	luding any incompatibilities			
Storage	Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.			
incompatible materials	Strong oxidizing agents.			
	8. Exposure Controls/Personal Protection			

### **Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL		
Diuron	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>		
Engineering controls	Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems. Provide appropriate exhaust ventilation at places where dust is formed. Ensure that eyewash stations and safety showers are close to the workstation location.			
Personal protective equipment Eye/Face Protection		or eye contact have eye flushing equipment available. Safety If splashes are likely to occur, wear:. Face-shield.		
Skin protection Respiratory protection	Long sleeved clothing. Chemical resistant gloves. Chemical resistant footwear plus socks. Where airborne exposure is likely, use NIOSH approved respiratory protection equipment			

appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134. In the case of dust or aerosol formation use respirator with an approved filter.

#### General hygiene considerations

Do not eat, drink or smoke when using this product. Wear suitable gloves and eye/face protection. Wear respiratory protection. Remove and wash contaminated clothing before re-use. Wash hands before breaks and immediately after handling the product.

# 9. Physical and Chemical Properties

# 9.1 Information on basic physical and chemical properties

Appearance Physical state Odor color	Viscous Liquid Faint white to Off-white	
Property	VALUES	Remarks/ Method
pH	5.31	Approximately
Melting point/freezing point		None known
Boiling Point/Range		None known
Flash Point	> 93 °C	None known
Evaporation Rate		None known
Flammability (solid, gas)		None known
Specific gravity	1.0735g/ml (average)	None known
Bulk density		None known
Water solubility		None known
Solubility in Other Solvents	No information available	None known
Partition coefficient: n-octanol/wa	iter	None known
Autoignition temperature		None known
Decomposition temperature		None known
Viscosity	587 mPas	average

# 9.2 OTHER INFORMATION

# **10. Stability and Reactivity**

<u>Reactivity</u> no data available

#### **Chemical stability**

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

Hazardous polymerisation does not occur.

#### Conditions to avoid

Extremes of temperature and direct sunlight.

### incompatible materials

Strong oxidizing agents.

#### Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon oxides. Nitrogen oxides (NOx).

# **11. Toxicological Information**

### Information on Likely Routes of Exposure

Product information	Adios: Acute oral LD50 (rat) = >4000 mg/kg Acute dermal LD50 (rat) = >5000 mg/kg Acute inhalation LC50 (rat) = >2.08 mg/L /4hr		
Inhalation	Harmful by inhalation.		
Eye contact	May cause slight irritation.		
Skin contact	May cause irritation.		
Ingestion	MAY BE HARMFUL IF SWALLOWED.		
Information on Toxicological Effec	ts_		
Symptoms No information available.			
Delayed and immediate effects as	well as chronic effects from short and long-term exposure		
Sensitization Mutagenic effects Carcinogenicity	No information available. no data available. Diuron:Effects in animals from short inhalation exposure to Diuron inlcude lethargy, incoordination, and non specific effects such as weight loss and irritation. Repeated ingestion exposures caused enlarged spleeen, increased liver and kidney weights, reduced growth rate, pallor, anemia, red blood cell destruction, cyanosis, increased liver enzyme activity. Long term effects inluded bone marrow changes, thickening of the urinary bladder, pigment deposits in the spleen and kidney effects. Chronic feeding studies indicate and increase in urinary bladder tumors in hgih does rats and an increase of mammary tumors in high does female mice werew observed. Diuron does not produce genetic damage in bacterial or mammalian cell cultures or in animal tests and is not considered a developmental toxicant. No evidence of developmental toxicity in rabbits and in rats developmental effects occurred at doses higher than those producing maternal toxicity. Rats demonstrated no reproductive toxicity. Diuron is identified by EPA as "likely human carcinogen".		
Reproductive effects STOT - Single Exposure STOT - Repeated Exposure Aspiration hazard	Not Available. no data available. no data available. No information available.		

# Numerical Measures of Toxicity - Product information

LD50 Oral	> 4000 mg/kg
LD50 Dermal	> 5000 mg/kg
LC50 Inhalation	> 2.08 mg/l (4-hr)

# 12. Ecological Information

### ecotoxicity

Toxic to aquatic life with long lasting effects Thiadizuron: FISH LC50 (rainbow trout) 96 hr = > 19 mg/L LC50 (Bluegill sunfish) 96 hr = > 32 mg/L Daphnia EC50 48 hr = > 10 mg/L

# Persistence/Degradability

Not readily biodegradable.

#### **Bioaccumulation/Accumulation**

Chemical name	Log Pow
Diuron	2.82
330-54-1	

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Other Adverse Effects no data available					
13. Disposal Considerations					
Waste Treatment Methods					
Waste Disposal Method	Pesticide wastes can be hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.				
Contaminated packaging	Refer to product label.				
	14. Transport Information				
DOT	When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated. When shipped in bulk, by vessel, or internationally use the IMDG shipping description:				
<u>TDG</u>	When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1 In bulk - use IMDG description				
IATA UN/ID no Proper shipping name Hazard class Packing group Description	UN3082 Environmentally hazardous substances, liquid, n.o.s (Thiadiazuron) 9 PG III Marine pollutant				
IMDG UN/ID no Proper shipping name Hazard class Packing group Environmental hazards	UN3082 Environmentally hazardous substances, liquid, n.o.s (Thiadiazuron) 9 PG III Marine pollutant				

# 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:

#### signal word

CAUTION

Harmful if swallowed. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark.

International Inventories	
USINV	Not present
DSL/NDSL	Not present
EINECS/	Not Present
ELINCS	
ENCS	Not Present
China	Not Present
KECL	Not Present
PICCS	Not Present
AICS	Not Present
TSCA	Not Present

**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 Commercial Chemical Substances/EU 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

# Federal Regulations

#### 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	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Diuron 330-54-1	100 lb			Х

## **CERCLA**

Chemical name	RQ		CERCLA EHS RQs	RQ	
Diuron	100 lb			RQ 100 lb final RQ	
330-54-1				RQ 45.4 kg final RQ	
CERCLA					
Component			RQ		
Diuron		100 lb			
330-54-1 ( 6 )					

#### <u>RCRA</u> Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Thidiazuron 51707-55-2 (12)			X	
Diuron 330-54-1 ( 6 )			Х	

State Regulations

Component		California Prop. 65 Carcinogen		
Diuron				
330-54-1 ( 6 )		·		
Chemical name	CAS No	CATEGORY		
Diuron	330-54-1	Carcinogen		
Prop 65 Pictogram	A			



Prop 65 Warning Statement California Proposition 65

This product can expose you to chemicals which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Diuron - 330-54-1	Х	Х	Х		
International regulations					

# U.S. EPA Label information

EPA Pesticide registration number 70506-486

16. Other Information					
NFPA_	HEALTH 1	flammability 2	Instability 0	Physical hazard -	
Preparation Date	31-Jan-2020				
Revision date	18-Ma	18-Mar-2022			
Revision Summary					
Update registration nu	umber				
Disclaimer					
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End of SDS