



Safety Data Sheet

Preparation Date 26-Apr-2023

Revision date 26-Apr-2023

Revision Number: 1

1. Identification of the Substance/Preparation and of the Company/Undertaking

Identification of the product

Product Description Shadow 3EC Herbicide

Other means of identification

Internal SDS code 12-0500B
Registration number(s) 70506-500

Recommended use of the chemical and restrictions on use

Recommended use Herbicide.
Uses advised against Activities contrary to label recommendation

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 610-223-2180
Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
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)

Serious eye damage/eye irritation	Category 2A
FLAMMABLE LIQUIDS	Category 4

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard Statements

Causes serious eye irritation
combustible liquid



Appearance Viscous

Physical state Liquid

Odor aromatic

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national regulations

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

- MAY BE HARMFUL IF SWALLOWED
- Toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Clethodim	99129-21-2	36.7
Hydrocarbons, C10-C13, aromatics	64742-94-5	52.49
Epoxydised sojaoil	8013-07-8	3

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 off immediately with soap and plenty of water removing all contaminated clothes and shoes. Call a poison control center or doctor for treatment advice.
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. Clean mouth with water. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects no data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician contains petroleum distillates and/or aromatic solvents.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Carbon oxides.

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

Use personal protective equipment. Avoid contact with skin and eyes. Take precautionary measures against static discharges. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

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.

Methods and material for containment 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

Avoid contact with skin and eyes. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Ensure that eyewash stations and safety showers are close to the workstation location. Wash thoroughly after handling. Keep away from heat, sparks and open flame. - No smoking. Check that all equipment is properly bonded and grounded. Use spark resistant tools.

Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed in a dry and well-ventilated place.

incompatible materials

OXIDIZERS.

8. Exposure Controls/Personal Protection

Exposure guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

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.

Personal protective equipment

Eye/Face Protection

Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.

Skin protection

Wear protective gloves/clothing.

Respiratory protection

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.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. 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	Viscous	
Physical state	Liquid	
Odor	aromatic	
color	amber	
<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	3.96	None known
Melting point/freezing point		None known
Boiling Point/Range		None known
Flash Point	61 C /141.8 F	Closed cup
Evaporation Rate		None known
Flammability (solid, gas)		None known
Specific gravity	0.9864 g/cm3	None known
Bulk density		None known
Water solubility		None known
Solubility in Other Solvents	No information available	None known
Partition coefficient: n-octanol/water		None known
Autoignition temperature		None known
Decomposition temperature		None known
Viscosity	14.0 cps @25 ° C	None known

9.2 OTHER INFORMATION- NONE

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

incompatible materials

OXIDIZERS.

Hazardous decomposition products

Nitrogen oxides (NOx). Oxides of sulfur.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information	Trizenta 3 EC (Shadow 3EC) Acute oral LD50 3129 mg/kg Acute dermal LD50 >5050 mg/kg Acute inhalation LC50 >2.23 mg/L/4hr
Inhalation	No known effect.
Eye contact	CAUSES EYE IRRITATION.
Skin contact	No known hazard in contact with skin.
Ingestion	MAY BE HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms No information available.

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

Sensitization No information available.
Mutagenic effects no data available.
Carcinogenicity Clethodim technical =
Cause liver effects and anemia in chronic studies in rodent and dogs.
non carcinogenic in lifetime feeding studies in rats and mice.
Not a reproductive toxicant in a 2 generation study in rats
Not a primary developmental oxican in rats/rabbits.
Not mutagenic or genotoxic based on overall weight of evidence in vitor and in vivo tests.
Reproductive effects Not Available.
STOT - Single Exposure no data available.
STOT - Repeated Exposure no data available.
Aspiration hazard No information available.

Numerical Measures of Toxicity - No information available

LD50 Oral 3129 mg/kg (rat)
LD50 Dermal > 5000 mg/kg (rat)
LC50 Inhalation > 8.0 mg/l (rat)

12. Ecological Information**ecotoxicity**

May be toxic to aquatic invertebrates
May be toxic to fish

Clethodim (technical) = FISH toxicity
Rainbow trout 96 hr LC50 = 65 mg/L
Bluegill sunfish 96 hr LC50 = 120 mg/L
AVIAN toxicity
Bobwhite quail LC50 = >6000 ppm
Mallard duck LC50 = >6000 ppm

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

No information available.

Chemical name	Log Pow
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Hydrocarbons, C10-C13, aromatics 64742-94-5	2.9 - 6.1
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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 IN NON-BULK packages by highway this material is classed as a combustible liquid and as such is not subject to the DOT regulations per 49 CFR 173.150(f) (2) and therefore can be designated as Not Regulated

When shipped domestically (US) in bulk - >119 gallon capacity - this material is classed as a combustible as per 49 CFR173.150 (f) as such the documentation will be noted as NA1993, Combustible Liquids, n.o.s. , PGIII

This regulation is limited to the U.S. only - international regulations do not recognize Combustible - when shipped internationally this product is Not regulated. Combustible designation is limited to the United States only as international transportation regulations do not recognize this classification.

TDG

NOT REGULATED

IATA

NOT REGULATED

IMDG

NOT REGULATED

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 WARNING

Harmful if swallowed. Causes moderate eye irritation.

International Inventories

USINV	Not present
DSL/NDSL	Not present
EINECS/ ELINCS	Not Present
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:

CERCLA

Not applicable

CERCLA

SARA Product RQ 0

RCRA**Pesticide Information**

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Clethodim 99129-21-2 (36.7)			X	
Hydrocarbons, C10-C13, aromatics 64742-94-5 (52.49)			X	
Epoxydised sojaoil 8013-07-8 (3)			X	

State Regulations**State Right-to-Know****International regulations****U.S. EPA Label information**

EPA Pesticide registration number 70506-500

16. Other Information

NFPA HEALTH 2 flammability 2 Instability 0 Physical hazard -

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Revision Summary

Add to system

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