



Safety Data Sheet

Preparation Date 11-Nov-2019

Revision date 11-Nov-2019

Revision Number: 1

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

Identification of the product

Product Description Komodo Herbicide

Other means of identification

Product code CANKOMO
Registration number(s) PMRA 33599

Recommended use of the chemical and restrictions on use

Recommended use Herbicide.

Uses advised against

Non labeled activities 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 1-800-438-6071

Emergency telephone number Chemtec: (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 Yellow to brown	Physical state Liquid , Emulsifiable concentrate (EC)	Odor Mild chemical
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Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not spray on an open flame or other ignition source

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

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

- Causes mild skin irritation
- Very toxic to aquatic life with long lasting effects

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
S-metolachlor	87392-12-9	91.5
calcium dodecylbenzene sulfonate	26264-06-2	1 - 5

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	Remove contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15-20 minutes. 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. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

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 Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO₂). Dry powder. Foam. Aquatic. Water spray.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

No information available.

Explosion data**Protective equipment and precautions for firefighters**

Use personal protective equipment. In the event of fire, wear self contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with skin and eyes. Use personal protective equipment.

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 Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Keep away from flames and hot surfaces. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

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

incompatible materials Strong oxidizing agents. Strong acids.

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 Ensure adequate ventilation, especially in confined areas.

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. Safety glasses with side-shields.

Skin protection

Wear protective gloves/clothing. Chemical resistant footwear plus socks.

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

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

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid , Emulsifiable concentrate (EC)		
Appearance	Yellow to brown	Odor	Mild chemical
color	No information available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	4.3	(1% aq)
Melting point/freezing point	no data available	
Boiling Point/Range	No information available	
Flash Point	95 °C / 203 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	Not required	No information available
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	1.1042 kg/l	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	no data available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
Liquid Density	No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization	No information available.
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Conditions to avoid

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

incompatible materials

Strong oxidizing agents. Strong acids.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Hydrogen chloride.

11. Toxicological Information

Information on Likely Routes of Exposure

Inhalation	May cause irritation of respiratory tract.
Eye contact	Severely irritating to eyes.
Skin contact	May be absorbed through the skin. May cause sensitization by skin contact.
Ingestion	HARMFUL IF SWALLOWED.

Component Information

Metolachlor
 Acute oral LD50 = 1063-1936 mg/kg (rat)
 Acute dermal LD50 = >2000 mg/kg (rabbit)
 Acute inhalation LC50 = >2910 mg/m³ (4hr rat)
 Not an eye or skin irritant (rabbit)
 May cause sensitization (guinea pig)

Information on Toxicological Effects

Symptoms No information available.

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

Sensitization	May cause sensitization by skin contact.
Mutagenic effects	no data available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	Not Available.
STOT - Single Exposure	no data available.
STOT - Repeated Exposure	no data available.
Chronic toxicity	Avoid repeated exposure.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - No information available

12. Ecological Information

ecotoxicity

S-metolachlor
 FISH
 Rainbow trout 96 hr = 1.23 mg/L
 Brown trout 21 day = 0.25 mg/L
 ALGAE
 Selenastrum capricornutum = 0.0008 mg/L
 Aquatic Invertebrates
 Daphnia magna 21 day = 5.9 mg/L
 BIRDS
 Duck LD50 = >2150 mg/kg

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

No information available.

Other Adverse Effects

no data available

13. Disposal Considerations**Waste Treatment Methods****Waste Disposal Method**

Pesticide wastes are acutely 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:

TDG

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	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (S-metolachlor)
Hazard class	9
Packing group	III
Description	IMDG - Marine Pollutant

IMDG

UN/ID no	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (S-metolachlor)
Hazard class	9
Packing group	III
EmS No.	F-A, S-F
Special Provisions	274, 335
Environmental hazards	Environmental hazards

15. Regulatory Information

This chemical/product is a pesticide product registered by the PMRA and is subject to specific label requirements under these regulations. The requirements may differ classification and hazard information required for safety data sheets and for labels of non-pesticide products. The following is information as required on the registered product label.

signal word

DANGER

Keep out of Reach of Children. DANGER - EYE IRRITANT. Potential skin sensitizer.
Contains petroleum distillates. Toxic to aquatic organisms.

International Inventories

USINV	Present
DSL/NDL	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

This product is a registered pesticide and therefore is exempt from TSCA requirements.

DSL/NDL - 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 does not contain any 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
calcium dodecylbenzene sulfonate 26264-06-2	1000 lb			X

CERCLA

Not applicable

Chemical name	RQ	CERCLA EHS RQs	RQ
calcium dodecylbenzene sulfonate 26264-06-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

CERCLA

Component	RQ
calcium dodecylbenzene sulfonate 26264-06-2 (1 - 5)	1000 lb

RCRA**Pesticide Information****State Regulations****State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
calcium dodecylbenzene sulfonate - 26264-06-2	X	X	X		

International regulations**U.S. EPA Label information**

EPA Pesticide registration number PMRA 33599

16. Other Information

NFPA **HEALTH 2** **flammability 0** **Instability 0** **Physical hazard -**

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Revision Summary

Add to system

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