



Safety Data Sheet (SDS)

Issue Date: 03-Oct-2023

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Version 1

1. IDENTIFICATION

Product identifier

Product Name

ADAMA QUIZALOFOP

Other means of identification

SDS #

ADAMA-361-CA

Registration Number(s)

34935 (*Pest Control Products Act*)

Recommended use of the chemical and restrictions on use

Recommended Use

Herbicide.

Details of the supplier of the safety data sheet

Registrant

ADAMA Agricultural Solutions Canada Ltd.
300-191 Lombard Avenue
Winnipeg, Manitoba R3B 0X1
1-855-264-6262

Emergency telephone number

Emergency Telephone

For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact ProPharma Group:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a pest control product registered by Health Canada's Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act (PCPA). These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada's Hazardous Product Regulations (WHMIS 2015).

Appearance Amber liquid

Physical state Liquid

Odor Faint

Classification

Aspiration toxicity	Category 1 - (H304)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin corrosion/irritation	Category 3 - (H316)

Signal Word

Danger

Hazard statements

May be fatal if swallowed and enters airways
Causes serious eye irritation
Causes mild skin irritation



Precautionary Statements - Prevention

Keep out of reach of children
 Obtain, read and follow all safety instructions before use
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF SWALLOWED: Immediately call a Poison Centre, Emergency Centre or Doctor. Do NOT induce vomiting
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Quizalofop-p-ethyl	100646-51-3	9-12
Hydrocarbons, C10-C13, aromatics, >1% naphthalene	Proprietary	78-88
2-Ethylhexanol	104-76-7	<2

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Description of first aid measures**General Advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection.

Eye Contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

Inhalation

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Ingestion

Call a POISON CENTER or doctor immediately. DO NOT induce vomiting. Never give anything by mouth to an unconscious person.

Self-Protection of the First Aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed**Symptoms**

None known.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Combustible material.

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. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

For Emergency Responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent from entering soil, ditches, sewers, streams and / or groundwater. See Section 12, Ecological Information. See section 13: DISPOSAL CONSIDERATIONS. Local authorities should be advised if significant spillages cannot be contained.

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 For small spills, absorb with sand, clay or other inert absorbent. Place in suitable containers for disposal. For large spills: collect the free product. Dike for later disposal. Absorb with an inert material, then place in a container suitable for chemical waste.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Open and handle container with care.

Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from freezing. Keep containers tightly closed in a dry, cool and well-ventilated place, but not below 0°C/ 32°F. Store locked up. Keep out of the reach of children. Store away from incompatible materials. Keep / store in original container only. Protect from sunlight. Protect from excessive heat. Do not use food or drink containers for mixing or storage. Keep away from fertilizer, seed, food or feed.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls Use only with adequate ventilation. Keep container tightly closed. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields or goggles.

Skin and Body Protection Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing and loading; and wear a hat during application. Coveralls, gloves, protective eyewear and hat are not required during application within a closed cab and/or cockpit.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Faint
Appearance	Amber Liquid	Odor Threshold	Not determined
Property	Values	Remarks • Method	
pH	6.0-7.5	(1% Solution)	
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	Not determined		
Flash Point	96.5°C / 205.7°F	Pensky-Martens Closed Cup	
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Not applicable for liquids		
Flammability Limits in Air			
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Relative Density	0.965 - 1.065 Kg/L		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient	See section 12 for more information		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not an explosive		
Oxidizing Properties	Not oxidizing		

10. STABILITY AND REACTIVITY

Reactivity

Not available.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks. Extreme temperatures and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye Contact	Causes serious eye irritation.
Skin Contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Quizalofop-p-ethyl 100646-51-3	= 1182 mg/kg (Rat)	-	-
Hydrocarbons, C10-C13, aromatics, >1% naphthalene	> 6000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	> 8500 mg/m ³ (Rat) 4 h
2-Ethylhexanol 104-76-7	= 3730 mg/kg (Rat)	= 1980 mg/kg (Rabbit)	> 227 ppm (Rat) 6 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	Not carcinogenic.
Aspiration hazard	May be fatal if swallowed and enters airways.

Numerical measures of toxicity

Acute Oral LD50 (Rat): >5,000 mg/kg

Acute Dermal LD50 (Rabbit): >4,000 mg/kg

Acute Inhalation LC50 (Rat): >5 mg/L (4-hr)

Eye Irritation: Irritating.

Dermal Irritation: Mildly irritating.

Dermal Sensitization: Not a skin sensitizer

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Hydrocarbons, C10-C13, aromatics, >1% naphthalene		2200: 96 h Pimephales promelas mg/L LC50	2.6: 96 h Chaetogammarus marinus mg/L LC50
2-Ethylhexanol 104-76-7	11.5: 72 h Desmodesmus subspicatus mg/L EC50	29.7: 96 h Pimephales promelas mg/L LC50 static 10.0 - 33.0: 96 h Lepomis macrochirus mg/L LC50 static 32 - 37: 96 h Oncorhynchus mykiss mg/L LC50 static 7.5: 96 h Oncorhynchus mykiss mg/L LC50 27 - 29.5: 96 h Pimephales promelas mg/L LC50 flow-through	39: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
2-Ethylhexanol 104-76-7	3.1

Other Adverse Effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Method s

Disposal of Wastes Do not contaminate water, food, or feed by storage or disposal. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

Contaminated Packaging Do not reuse this container for any purpose. This is a recyclable container and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14. TRANSPORT INFORMATION

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

DOT

UN/ID No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. (Quizalofop-p-ethyl, Hydrocarbons, C10-C13, aromatics, >1% naphthalene)
Hazard class	9
Packing Group	III
Marine Pollutant	Yes
	49 CFR §171.4 Not regulated when transported on land by motor vehicle or rail car in non-bulk containers (119 Gal, 450 Liters).

ICAO/IATA

UN number	UN3082
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Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Quizalofop-p-ethyl, Hydrocarbons, C10-C13, aromatics, >1% naphthalene)
Hazard class 9
Packing Group III
Marine Pollutant Yes
 UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

IMDG

UN number UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Quizalofop-p-ethyl, Hydrocarbons, C10-C13, aromatics, >1% naphthalene)
Hazard class 9
Packing Group III
Marine Pollutant Yes

TDG

UN/ID No UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Quizalofop-p-ethyl, Hydrocarbons, C10-C13, aromatics, >1% naphthalene)
Hazard class 9
Packing Group III
Marine Pollutant Yes
 Section 1.45.1 of the TDG Regulations provides an exemption from documentation and safety marks only for this product and only when transported by road or railway vehicle.

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS / ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Quizalofop-p-ethyl		ACTIVE					X		
Hydrocarbons, C10-C13, aromatics, >1% naphthalene	X	ACTIVE	X	X		X	X	X	X
2-Ethylhexanol	X	ACTIVE	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

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

Hazardous Products Regulations Information:

This product has been classified in accordance with the amended *Hazardous Products Act* (HPA) and the Hazard Criteria of the *Hazardous Products Regulations* (HPR), and the SDS contains all the information required by the HPR.

Hazardous Products Act Information:

Pest control products, as defined in subsection 2(1) of the *Pest Control Products Act* (PCPA), are excluded from the application of the *Hazardous Products Act* (that is, pest control products are exempt from the supplier labelling and SDS requirements of the *Hazardous Products Act* and *Regulations*). This product has voluntarily been classified according to the WHMIS 2015 standard.

Pest Control Products Act Registration Number: 34935

Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

Product Statement

This chemical is a product registered by the Canadian Pest Control Products Act 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-PCPA registered chemicals. Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product. Following is the hazard information as required on the pesticide label:



PCPA Label Hazard Communications

Read the label and booklet before using.

Keep out of the reach of children.

CAUTION – POISON

Difference between SDS and Pest Control Products Act label

Hazardous Information Elements	PCPA	SDS
Signal Word(s)	Danger/Warning	Warning
Pictogram(s)		
Hazard statement(s)		
Acute toxicity - Dermal	NA	H316 - Causes mild skin irritation
Acute toxicity - Oral	NA	H304 - May be fatal if swallowed and enters airways
Acute toxicity - Inhalation	Harmful if inhaled. Avoid breathing vapours or spray mist. Use adequate ventilation.	
Eye irritation	NA	H319 - Causes serious eye irritation
Skin sensitization	NA	Not a skin sensitizer

16. OTHER INFORMATION

NFPA

Health Hazards

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS

Health Hazards

Not determined

Flammability

Not determined

Physical hazards

Not determined

Personal Protection

See Section 8

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Revision Note: New

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. This product is under the jurisdiction of the Pest Control Products Act and is exempt from the requirements for a WHMIS compliant SDS. Hazardous properties of all ingredients have been considered in the preparation of this SDS. Read the entire SDS for the complete hazard evaluation of this product.

End of Safety Data Sheet