

# Safety Data Sheet (SDS)

Issue Date: 20-Nov-2020 Revision Date: 20-Nov-2020 Version 1

## 1. IDENTIFICATION

Product identifier

Product Name Thrasher®

Other means of identification

SDS # ADAMA-315

Registration Number(s) 28779 (Pest Control Products Act)

UN/ID No UN3082

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. HAZARD IDENTIFICATION

This chemical is a product registered under the *Pest Control Products Act* (PCPA) of Canada 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. Please see Section 15 for additional information. This product has been classified according to Canada's *Hazardous Product Regulations* (WHMIS 2015).

Appearance: Amber to brown liquid Physical state: Liquid Odor: Phenolic and hydrocarbon

## Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A
Skin corrosion/irritation	Category 2
Carcinogenicity	Category 2
Aspiration toxicity	Category 1

**Hazard Pictogram(s)** 



Signal Word DANGER

Hazard statement(s) Harmful if swallowed

Harmful if inhaled
Causes serious eye irritation
Causes skin irritation
Suspected of causing cancer
May be fatal if swallowed and enters airways

## **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Contaminated work clothing must not be allowed out of the workplace

# Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

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

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up.

Keep out of the reach of children.

## **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 %
2,4-D,2-ethylhexyl ester	25168-26-7	28-32
Bromoxynil octanoate (octanoic acid,2,6-dibromo-	1689-99-2	28-32
4-cyanophenyl ester)		
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	30-34

<sup>\*\*</sup>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.\*\*

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 When possible, have the product label or product name and Pest Control Product

Registration Number with you when calling a poison control center or doctor or going for

treatment.

Eye Contact Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact

lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control

centre or doctor for treatment advice.

**Skin Contact** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20

minutes. Call a poison control centre 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 by mouth-to-mouth, if possible. Call a poison control centre or

doctor for further treatment advice

Ingestion Call a poison control centre or doctor immediately for treatment advice. Do not induce

vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to

the person. Do not give anything by mouth to an unconscious person.

# Most important symptoms and effects, both acute and delayed

**Symptoms** Harmful if swallowed. Harmful if inhaled. Causes serious eye irritation. Causes skin irritation.

Suspected of causing cancer. May be fatal if swallowed and enters airways.

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

**Notes to Physician** This product contains petroleum distillates at greater than 10%, vomiting may cause

aspiration pneumonia. This product may cause mild irritation to the eyes. Overexposure to 2,4-D may cause coughing, burning, dizziness or temporary loss of muscle coordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea. Treat

symptomatically.

## 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

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

**Unsuitable Extinguishing** 

Media

Not determined.

#### **Specific Hazards Arising from the Chemical**

When heated above the flash point, this material emits vapors which, when mixed with air, can burn or be explosive. Heavier than air, vapors may travel to an ignition source.

Hazardous combustion

products

Explosion Data

Sensitivity to Mechanical

**Impact** 

Sensitivity to Static

Discharge

Hydrogen bromide, other bromine compounds, carbon dioxide, carbon monoxide, oxides of nitrogen, oxides of sulfur and other potentially toxic combustion products may be present.

No sensitivity expected based on similar products.

Sensitivity possible based on solvent 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. 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 Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard

area. Keep unnecessary and unprotected personnel from entering.

#### **Environmental precautions**

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

12, Ecological Information. See Section 13: Disposal Considerations.

## Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to

contain the flow of material.

Methods for Clean-Up

Surround and absorb spills with inert material such as perlite, clay granules, vermiculite,

sand or dirt. Contain all affect material in a closed, labeled container for proper disposal. Isolate from other waste materials. Clean contaminated area such as hard surfaces with detergent and water, collecting cleaning solution for proper disposal. Large spills to soil or

similar surfaces may necessitate removal of top soil.

## 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 ideally not below 0°C/ 32°F (This THRASHER formulation will solidify at temperatures below -20°C but will become usable at temperatures above 0°C). Store locked up. Keep out of the reach of children. Keep/store only in original container. Do not use food or drink containers for mixing or storage. Keep away from food, drink and animal feeding stuffs.

Packaging Materials Do not reuse container.

**Incompatible Materials** Avoid contact with strong acidic, basic or oxidizing agents.

# 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** Please refer to the product label. Use only with adequate ventilation. Use process

enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure

to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Use splash goggles or face shield when contact may occur.

**Skin and Body Protection** Chemical-resistant gloves such as nitrile. Long sleeved shirt, long pants, socks and shoes

suggested as minimum work clothing. Coveralls or a chemical-resistant apron should also be worn when open pouring from containers greater than 5L. Use other equipment appropriate

to specific situations.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. Wear an appropriate

NIOSH/MSHA approved respirator if ventilation is inadequate.

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 Characteristic phenolic and

hydrocarbon Not determined

Appearance Amber to brown liquid Odor Threshold Not determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 3 - 5 (1% dilution)
Melting Point/Freezing Point Approx. -20°C/-4°F

Boiling Point/Boiling Range NA

Flash Point >61°C/141.8°F Pensky-Martens Closed Cup

Evaporation Rate NA

Flammability (Solid, Gas) Liquid-Not applicable

Flammability Limits in Air

Upper Flammability Limits NA
Lower Flammability Limit NA
Vapor Pressure NA
Vapor Density NA

Relative Density 1.121 g/mL (Water = 1)

Water Solubility Product is emulsifiable in water

Solubility in other solvents NA

Partition Coefficient Not determined

Auto-ignition Temperature NA

Decomposition TemperatureNot determinedKinematic ViscosityNot determinedDynamic ViscosityNot determinedExplosive PropertiesNot determinedOxidizing PropertiesNot determined

**Other information** 

NA NA

# 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 Under normal conditions of storage and use, hazardous polymerization will not occur.

# **Conditions to Avoid**

See Sec. 7 Handling & Storage.

## **Incompatible materials**

Avoid contact with strong acidic, basic or oxidizing agents.

# **Hazardous decomposition products**

Hydrogen bromide. Other bromine compounds. Hydrogen chloride. Other chlorine compounds. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. Oxides of nitrogen. Oxides of sulfur and other potentially toxic combustion products may be present.

# 11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

**Eye Contact** Causes serious eye irritation.

**Skin Contact** Causes skin irritation.

Inhalation Harmful if inhaled.

**Ingestion** Harmful if swallowed.

**Component Information** 

Chemical name	Oral LD <sub>50</sub>	Dermal LD₅0	Inhalation LC₅₀	
2,4-D, 2-ethylhexyl ester	= 982 mg/kg (Rat)	> 2 g/kg (Rabbit)	-	
Bromoxynil octanoate (octanoic acid,2,6-dibromo-4-cyanophenyl ester)	= 250 mg/kg (Rat) = 238 mg/kg (Rat)	= 1675 mg/kg (Rabbit) > 2 mg/kg (Rat)		
Solvent naphtha (petroleum), heavy aromatic	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m³ (Rat) 4 h	

## Symptoms related to the physical, chemical and toxicological characteristics

**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.

**Aspiration hazard** May be fatal if swallowed and enter airways

Chemical Name	ACGIH	IARC	NTP	OSHA
2,4-D,2-ethylhexyl ester		Group 2B		X

#### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

## **Numerical measures of toxicity**

Acute Inhalation LC<sub>50</sub> (Rat): 606 mg/L (4-hr) Eye Irritation: Moderately irritating Acute Oral LD<sub>50</sub> (Rat): >2000 mg/Kg (female) **Dermal Irritation**: Moderately irritating Acute Dermal LD<sub>50</sub> (Rat): 2.04 mg/Kg **Dermal Sensitization**: Not determined

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Solvent naphtha (petroleum),	72 h EC <sub>50</sub> : Skeletonema costatum	96 h LC <sub>50</sub> : Pimephales promelas	48 h EC <sub>50</sub> : Daphnia magna
heavy aromatic	(phytoplankton) 2.5 mg/L	(fathead minnow) 41 mg/L	(water flea) 0.95 mg/L
		96 h LC <sub>50</sub> : Pimephales promelas	
		19 mg/L static	
		96 h LC <sub>50</sub> : Pimephales promelas	
		45 mg/L flow-through	
		96 h LC <sub>50</sub> : Lepomis macrochirus	
		(bluegill sunfish) 1740 mg/L	
		static	
		96 h LC <sub>50</sub> : Oncorhynchus mykiss	
		(rainbow trout) 2.34 mg/L flow-	
		through	

## Persistence/Degradability

Not determined.

## **Bioaccumulation**

Not determined.

Mobility

Chemical name	Partition coefficient

Solvent naphtha (petroleum), heavy aromatic 2.9 - 6.1

#### **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 Methods** 

Disposal of Wastes Follow container label instructions for disposal of wastes generated during use in compliance

with the product label.

Dispose in accordance with all local, state/provincial and federal regulations.

**Contaminated Packaging** Follow advice on product label.

Do not re-use empty containers.

Triple rinse containers.

Puncture container to avoid re-use.

Consult state and local regulations regarding the proper disposal of container.

# 14. TRANSPORT INFORMATION

**Note** The transport classification(s) and information provided in this section are for informational

purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by mode of transportation, container volume and package sizes. The transportation of materials and related activities are subject to all applicable laws, rules and requirements of regional and/or country regulations. 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 substances, liquid or solid, n.o.s. (Bromoxynil, 2,4-D)

Hazard class9Packing GroupIIIMarine PollutantYes

<119 Gal (450 Liters): Not regulated when transported on land by motor vehicle or rail car in

non-bulk containers.

≥119 Gal (450 Liters): REGULATED

Refer to 49 CFR §171.4, 172.101 Appendix A & 173.132(b)(3)

**IATA** 

UN number UN3082

Proper Shipping Name Environmentally hazardous substances, liquid or solid, n.o.s. (Bromoxynil, 2,4-D)

Transport hazard class(es) 9
Packing Group III
Marine Pollutant Yes

**IMDG** 

UN number UN3082

Proper Shipping Name Environmentally Hazardous Substance, liquid, n.o.s. (Bromoxynil, 2,4-D)

Transport hazard class(es) 9
Packing Group III
Marine Pollutant Yes

**TDG** 

UN/ID No UN3082

Proper Shipping Name Environmentally Hazardous Substance, liquid, n.o.s. (Bromoxynil, 2,4-D)

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.

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA special provision A197, and ADR/RID special provision 375.

# 15. REGULATORY INFORMATION

## **International Inventories**

Chemical name	TSCA	DSL/NDSL	EINECS /	ENCS	IECSC	KECL	PICCS	AICS
			ELINCS					
2,4-D,2-ethylhexyl ester			Х					Х
Bromoxynil octanoate (octanoic acid,2,6-	X	X	Х					X
dibromo-4-cyanophenyl ester)								
Solvent naphtha (petroleum), heavy aromatic	X	X	X		Х	Present	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**

Chemical Name	Hazardous Substances RQs	Reportable Quantity (RQ)
2,4-D,2-ethylhexyl ester	100 lb	RQ 100 lb final
		RQ 45.4 kg final

#### **SARA 313**

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Bromoxynil octanoate (octanoic acid,2,6-dibromo-4-	1689-99-2	28-32	1.0
cyanophenyl ester)			

**CWA (Clean Water Act)** 

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
2,4-D,2-ethylhexyl este	er 100 lb			X

# **US State Regulations**

## **California Proposition 65**

This product contains the following Proposition 65 chemicals:

The product contains the following Troposition of chemicals.	
Chemical Name	California Proposition 65
Bromoxynil octanoate (octanoic acid,2,6-dibromo-4-cyanophenyl ester)	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Bromoxynil octanoate (octanoic acid,2,6-dibromo-4-cyanophenyl ester)	X		
2,4-D,2-ethylhexyl ester		Х	Х

# **CANADIAN REGULATIONS**

There are Canada-specific environmental requirements for handling, use and disposal of this pest control product that are

indicated on the product 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 is exempt under WHMIS 2015 but has voluntarily been classified according to the WHMIS 2015 standard.

#### Pest Control Products Act Registration Number: 28779

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 pest control product registered and regulated by Health Canada's Pest Management Regulatory Agency (PMRA) and is subject to certain labelling requirements under the *Pest Control Products Act*. These requirements differ from the classification criteria and hazard information required for GHS-consistent 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. The following is the hazard information required on the pest control product label:

# PCPA Label Hazard Communications

WARNING POISON CAUTION: EYE IRRITANT CAUTION: SKIN IRRITANT

KEEP OUT OF THE REACH OF CHILDREN

HARMFUL OR FATAL IF SWALLOWED. Causes eye and skin irritations. DO NOT get in eyes. DO NOT get on skin.

#### Difference between SDS and Pest Control Products Act label

	PCPA	SDS	
Signal Word	Warning Poison	Danger	
Acute toxicity - Oral	Harmful or fatal if swallowed.	Harmful if swallowed	
Acute toxicity - Inhalation	N/A	Harmful if inhaled	
Acute toxicity - Dermal	N/A	N/A	
Serious Eye Damage/Eye Irritation	Eye irritant	Causes serious eye irritation	
Skin Corrosion/Irritation	Skin irritant	Causes skin irritation	
Skin sensitization	Potential skin sensitizer	N/A	
Carcinogenicity	N/A	Suspected of causing cancer	
Aspiration	N/A	May be fatal if swallowed and enters airways	

# **16. OTHER INFORMATION**

NFPA	<b>Health Hazards</b>	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
HMIS_	Health Hazards	Flammability	Physical hazards	Personal Protection
	Not determined	Not determined	Not determined	See Section 8

Issue Date:16-Nov-2020Revision Date:16-Nov-2020Revision Note:New product

## <u>Disclaimer</u>

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**