



Safety Data Sheet

Issue Date: 02-Feb-2018

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name

ADAMA Clopyralid 360

Other means of identification

SDS #

ADAMA-247

Registration Number(s)

Pest Control Product Reg. No. 32898

UN/ID No

UN1993

Recommended use of the chemical and restrictions on use

Recommended Use

Herbicide.

Details of the supplier of the safety data sheet

Manufacturer Address

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

Emergency Telephone Number

Emergency Telephone (24 hr)

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 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. Please see Section 15 for additional information. This product has been classified according to Canada's Hazardous Product Regulations (WHMIS 2015).

Appearance red to brown liquid

Physical state Liquid

Odor Sweet

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2B
Flammable Liquids	Category 3

Signal Word

Warning

Hazard statements

Harmful if inhaled
Causes eye irritation
Flammable liquid and vapor

**Precautionary Statements - Prevention**

Wear protective gloves/eye protection/face protection
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wash face, hands and any exposed skin thoroughly after handling
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Call a poison center or doctor/physician if you feel unwell
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool
 Keep out of the reach of children

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Clopyralid	57754-85-5	40.9
Isopropanol	67-63-0	5
Ehtylene oxide, propylene oxide and di-sec-butylphenol polymer	69029-39-6	1
Inert balance	Proprietary	53.1

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.

4. FIRST AID MEASURES

First Aid Measures**General Advice**

Take the container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

Eye Contact

Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center 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 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 poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms	Harmful if inhaled. Causes eye irritation.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically and supportively.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water fog. Carbon dioxide (CO₂). Dry chemical. Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor. This material will not burn until the water has evaporated. Residue can burn. Container may rupture from gas generation in a fire situation.

Hazardous Combustion Products Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

Protective equipment and precautions for firefighters

Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this SDS. 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	Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Keep personnel out of low areas. Keep upwind of spill. Ventilate area of leak or spill. No smoking in area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Ground and bond all containers and handling equipment. Vapor explosion hazard. Keep out of sewers. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
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Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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Methods and material for containment and cleaning up

Methods for Containment	Contain spilled material if possible. Pump with explosion-proof equipment. If available, use foam to smother or suppress. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers.
Methods for Clean-Up	For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling	Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep container closed. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Electrically ground and bond all equipment.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Minimize sources of ignition, such as static build-up, heat, spark or flame. Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.
Incompatible Materials	Avoid contact with: Acids. Halogenated organics. Oxidizers. Avoid contact with metals such as: Aluminum. Zinc. Brass. Copper.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³

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.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear goggles or face shield. Refer to 29 CFR 1910.133 for eye and face protection regulations.
Skin and Body Protection	Rubber apron. Chemically resistant gloves. Rubber boots. Long sleeve shirt and long pants. Refer to 29 CFR 1910.138 for appropriate skin and body protection.
Respiratory Protection	This material may be a respiratory irritant and, unless ventilation is adequate, the use of approved respiratory protection is recommended. Use this material only in well-ventilated areas. Refer to 29 CFR 1910.134 for respiratory protection requirements.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Sweet
Appearance	red to brown liquid	Odor Threshold	Not determined
Color	Red to brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7.5-8.0	
Melting point / freezing point	Not determined	
Boiling Point / Boiling Range	100°C	
Flash Point	47.2°C	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper Flammability Limit	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	23.5 mmHg	
Vapor Density	1.06	
Relative Density	1.161	
Water Solubility	Miscible in water	
Solubility in other solvents	Not determined	
Partition Coefficient	See Section 12 for ecological data	
Autoignition temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	7 cPs	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

Other Information

Density	1.161 g/cm ³
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10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Unstable at elevated temperatures.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization	Hazardous polymerization does not occur.
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Conditions to Avoid

Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid direct sunlight.

Incompatible Materials

Avoid contact with: Acids. Halogenated organics. Oxidizers. Avoid contact with metals such as: Aluminum. Zinc. Brass. Copper.

Hazardous Decomposition Products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Chlorinated pyridine. Hydrogen chloride. Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes eye irritation.
Skin Contact	Avoid contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Clopyralid 57754-85-5	= 2675 mg/kg (Rat)	-	-
Isopropanol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
Inert balance	> 90 mL/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

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 Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. Group 3 - Not Classifiable as to Carcinogenicity in Humans.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropanol 67-63-0		Group 3		X

Numerical measures of toxicity

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

Acute Dermal LD50 (Rabbit): >5,000 mg/kg

Acute Inhalation LC50 (Rat): >3.0 mg/L (4-hr)

Eye Irritation: Irritating.

Dermal Irritation: Slightly irritating.

Dermal Sensitization: Not a skin sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Isopropanol 67-63-0	1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50 11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static	13299: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Isopropanol 67-63-0	0.05

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

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

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Isopropanol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION**DOT**

UN/ID No UN1993
 Proper Shipping Name Flammable liquid, n.o.s. (Isopropanol)
 Hazard Class 3
 Packing Group III

IATA

UN/ID No UN1993
 Proper Shipping Name Flammable liquid, n.o.s. (isopropanol)
 Hazard Class 3
 Packing Group III

IMDG

UN/ID No UN1993
 Proper Shipping Name Flammable liquid, n.o.s. (isopropanol)
 Hazard Class 3
 Packing Group III

TDG

UN/ID No UN1993
 Proper Shipping Name Flammable liquid, n.o.s. (isopropanol)
 Hazard Class 3
 Packing Group III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINC S	ENCS	IECSC	KECL	PICCS	AICS
Clopyralid			X					X
Isopropanol	X	X	X	Present	X	Present	X	X
Ehtylene oxide, propylene oxide and di-sec-butylphenol polymer	X	X			X			X
Inert balance	X	X	X		X	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/ELINC S - 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

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Isopropanol - 67-63-0	67-63-0	5	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isopropanol 67-63-0	X	X	X

Pesticide Registration Number Pest Control Reg. No. 32898

Pest Control 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:

Product Label

SIGNAL WORD: CAUTION/POISON/DANGER

Eye Irritant

Harmful if absorbed through the skin

May cause skin irritation

Difference between SDS and product label

	Product Label	OSHA
Signal Word	Caution/Poison/Danger	Warning
Acute toxicity - Inhalation	N/A	Harmful if inhaled
Acute toxicity- Dermal	Harmful if absorbed through the skin	N/A
Serious eye damage/irritation	Eye irritant	Causes eye irritation
Corrosive to skin	May cause skin irritation	N/A

16. OTHER INFORMATION**NFPA****Health Hazards**

2

Flammability

2

Instability

1

Special Hazards

None

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical hazards

Not determined

Personal Protection

Not determined

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Revision Note:

New format

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.

End of Safety Data Sheet