1. IDENTIFICATION

**Product Identifier**

**Product Name**  
Ladder 240 EC

**Other means of identification**

**SDS #**  
ADAMA-273

**Registration Number(s)**  
Pest Control Product Reg. No. 29495

**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) and the US Hazard Communication Standard (HCS 2012).

**Appearance**  
Light to dark brown liquid

**Physical state**  
Liquid

**Odor**  
Aromatic

### Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2B</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>Category 1</td>
<td></td>
</tr>
</tbody>
</table>

**Signal Word**

Danger
**Hazard statements**
Harmful if swallowed
Causes skin irritation
Causes eye 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

**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 (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
If skin irritation occurs: Get medical advice/attention
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
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

---

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLODINAFOP-PROPARGYL</td>
<td>105512-06-9</td>
<td>&gt;22</td>
</tr>
<tr>
<td>Naphtha (petroleum), heavy aromatic</td>
<td>64742-94-5</td>
<td>&lt;70</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt;8</td>
</tr>
</tbody>
</table>

**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 to 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. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquids to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects:

Symptoms: Harmful if swallowed. Causes skin irritation. Causes serious eye 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 a petroleum distillate. DO NOT INDUCE VOMITING. Vomiting may cause aspiration pneumonia. Treat symptomatically for ingestion and/or skin and eye contact.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing measures (e.g., water, foam, CO2, dry powder, or water spray) that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: Not determined.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition.

Protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes, and products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Use personal protective equipment as required.

Environmental precautions

Methods and material for containment and cleaning up:

Methods for Containment: Dike to prevent contamination of local water sources. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. Dispose of all waste and rinsate in the appropriate manner. Decontaminate tools and equipment following cleanup.

Methods for Clean-Up: Dike spill using absorbent or impervious materials such as earth, sand, or clay. Prevent material from entering public sewer system or any waterway. If spilled on the ground,
affected area should be removed and placed in an appropriate container for disposal. Clean up small spills immediately, use proper personal protection. Absorb spill with absorbent material such as pet litter. Sweep up and place in a chemical container. Seal the container and handle in an approved manner. Keep spills out of streams and domestic water supplies.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Keep out of reach of children. Keep container closed when not in use. Handle and open container in a manner as to prevent spillage. Do not get on skin or in eyes. Do not ingest. Avoid breathing vapors and mists. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental splashes of contact with this material.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Store the product in closed original container in a well-ventilated room. Keep out of reach of children, unauthorized persons and animals. To prevent contamination store this product away from food, feed, and fertilizer.

Incompatible Materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>IDLH: 250 ppm</td>
</tr>
<tr>
<td>91-20-3</td>
<td>S* (Skin)</td>
<td>TWA: 50 mg/m³</td>
<td>TWA: 10 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 10 ppm</td>
<td>(vacated) TWA: 50 mg/m³</td>
<td>TWA: 50 mg/m³</td>
</tr>
<tr>
<td></td>
<td>(vacated) STEL: 15 ppm</td>
<td>(vacated) STEL: 75 mg/m³</td>
<td>STEL: 15 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 75 mg/m³</td>
</tr>
</tbody>
</table>

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

Wear goggles or face shield.

Skin and Body Protection

Wear coveralls or long sleeved shirt and long legged pants, chemical resistant gloves.

Respiratory Protection

In areas with inadequate ventilation a NIOSH-approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a self-contained breathing apparatus may be required when working with this product.

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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light to dark brown liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Light to dark brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Aromatic solvent</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>pH</td>
<td>4-6</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>102°C/216°F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>32.5 mPa(s)</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
</tr>
<tr>
<td>Other Information</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>1.08 g/mL</td>
</tr>
</tbody>
</table>

**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.

**Conditions to Avoid**
None known.

**Incompatible Materials**
Strong oxidizing agents; Bases; Mineral acids..

**Hazardous Decomposition Products**
Hazardous Decomposition Products: Chlorine, nitrogen oxides..

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<table>
<thead>
<tr>
<th>Product Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Do not inhale.</td>
</tr>
</tbody>
</table>
Ingestion
Harmful if swallowed.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), heavy aromatic 64742-94-5</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2 mL/kg (Rabbit)</td>
<td>&gt; 590 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Naphthalene 91-20-3</td>
<td>&gt; 1110 mg/kg (Rat) = 490 mg/kg (Rat)</td>
<td>&gt; 20 g/kg (Rabbit) = 1120 mg/kg (Rabbit)</td>
<td>&gt; 340 mg/m³ (Rat) 1 h</td>
</tr>
</tbody>
</table>

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
Suspected of causing cancer.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene 91-20-3</td>
<td>A3</td>
<td>Group 2B</td>
<td>Reasonably Anticipated</td>
<td>X</td>
</tr>
</tbody>
</table>

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

Aspiration hazard
May be fatal if swallowed and enters airways.

Product Information (Numerical measures of toxicity)

Acute Oral LD50 (Rat): 2,000 mg/kg
Acute Dermal LD50 (Rabbit): >2,000 mg/kg
Acute Inhalation LC50 (Rat): >5.05 mg/L
Eye Irritation: Moderately irritating
Dermal Irritation: Mildly irritating
Dermal Sensitization: Not a contact sensitizer

12. ECOLOGICAL INFORMATION

Ecotoxicity
This product contains aromatic petroleum distillates which are toxic to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured or low in organic matter such as clay). When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), heavy aromatic 64742-94-5</td>
<td>2.5: 72 h Skeletonema costatum mg/L EC50</td>
<td>41: 96 h Pimephales promelas mg/L LC50 2.34: 96 h Oncorhynchus mykiss mg/L LC50 19: 96 h Pimephales promelas mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through 1740: 96 h Lepomis macrochirus mg/L LC50 static 0.95: 48 h Daphnia magna mg/L EC50</td>
<td>0.95: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Naphthalene 91-20-3</td>
<td>0.4: 72 h Skeletonema costatum</td>
<td>31.0265: 96 h Lepomis macrochirus</td>
<td>2.16: 48 h Daphnia magna mg/L</td>
</tr>
</tbody>
</table>

Page 6 / 9
<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), heavy aromatic</td>
<td>2.9 - 6.1</td>
</tr>
<tr>
<td>Naphthalene 91-20-3</td>
<td>3.6</td>
</tr>
</tbody>
</table>

**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. 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.

**US EPA Waste Number**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RCRA</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>U165</td>
<td>Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145</td>
<td>U165</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene 91-20-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene 91-20-3</td>
<td>Toxic</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT Not regulated per 1.45.1 Marine Pollutants Exemption if transported solely on land by road vehicle or railway vehicle

TDG

IATA

UN/ID No  UN3082
Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s. (Clodinafop-propargyl)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

IMDG

UN/ID No  UN3082
Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s. (Clodinafop-propargyl)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLODINAFOP-PROPARGYL</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naphtha (petroleum), heavy aromatic</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

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
Not applicable

SARA 313
Not applicable
CWA (Clean Water Act)
Not applicable

US State Regulations

California Proposition 65
Not applicable

U.S. State Right-to-Know Regulations
Not applicable

Pesticide Registration Number Pest Control Product Reg. No. 29495

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.

Product Label
CAUTION POISON
WARNING- EYE AND SKIN IRRITANT
Keep out of reach of children
Read the label and booklet before using

Difference between SDS and product label

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Product Label</th>
<th>SDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity- Oral</td>
<td>N/A</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Skin irritant</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>Serious Eye Damage/Irritation</td>
<td>Eye irritant</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>N/A</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>Aspiration Toxicity</td>
<td>N/A</td>
<td>May be fatal if swallowed and enters airways</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>See Section 8</td>
</tr>
</tbody>
</table>

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