1. IDENTIFICATION

Product Identifier
Product Name
Armory 240 Herbicide

Other means of identification
SDS # ADAMA-230
Registration Number(s) Pesticide Control Product Reg. No. 32726
UN/ID No UN1760

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 Dark brown liquid
Physical state Liquid

Classification
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 3 |
| Serious eye damage/eye irritation | Category 2B |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Corrosive to Metals | Category 1 |

Signal Word Danger
Hazard statements
Toxic if inhaled
Harmful if swallowed
Causes eye irritation
May cause respiratory irritation
Causes damage to organs through prolonged or repeated exposure
May be corrosive to metals

Precautionary Statements - Prevention
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
Keep only in original container

Precautionary Statements - Response
Get medical advice/attention if you feel unwell
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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
IN CASE OF SPILL: Absorb spillage to prevent material damage

Precautionary Statements - Storage
Keep containers tightly closed in a dry, cool and well-ventilated place
Store locked up
Keep out of the reach of children
Store in corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal
Dispose of in accordance with federal, provincial and local regulations to an approved waste disposal plant

Other hazards
Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diquat dibromide</td>
<td>85-00-7</td>
<td>37-40</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 container, label or product name and pest control product registration number with you when seeking medical attention.
Eye Contact  IMMEDIATELY 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 anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms  Toxic if inhaled. Harmful if swallowed. Causes eye irritation. May cause respiratory irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician  To be effective, treatment for ingestion of the product must begin IMMEDIATELY. If swallowed, give adsorbent suspension, for example either activated charcoal (100 g for adults or 2 g/kg body weight for children) or bentonite clay (100 to 150 g for adults or 2 g/kg body weight for children), mixed with a purgative (MgSO4, Na2SO4 or mannitol). Maintain and monitor electrolyte and fluid status daily. Consider haemodialysis or haemoperfusion using charcoal column. If in eyes, treat symptomatically, using antibiotics and steroids as necessary. Symptoms may develop gradually. Severe damage may be caused by apparently trivial contact and healing may be delayed. Medical supervision should continue until complete healing has occurred. The use of supplemental oxygen is contraindicated. Do no administer supplemental oxygen unless the patient develops severe hypoxemia.

5. FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media  No information available.

Specific Hazards Arising from the Chemical  No specific hazard known.

Hazardous Combustion Products  Smoke, fumes or vapors, and oxides of carbon.

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.

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

Methods for Containment
Prevent further leakage or spillage if safe to do so. Prevent run-off to sewers, streams or other bodies of water.

Methods for Clean-Up
Keep in suitable, closed containers for disposal. 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 and animals. DO NOT get on skin or clothing. DO NOT get in eyes. Do not eat, drink, handle or use tobacco, or apply cosmetics in areas where there is potential for exposure to this product. Users should wash hands and face before eating, drinking, chewing gum, handling tobacco or using the toilet. Store and wash all protective clothing separately from household laundry. Do not contaminate food, feed, domestic or irrigation water supplies, lakes, streams and ponds.

Conditions for safe storage, including any incompatibilities
Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep only in original container. Store in a safe place, away from children. To prevent contamination, store this product away from food or feed. Store above 0°C (32°F). If crystallization occurs because the product is stored below 0°C (32°F), warm product to room temperature and agitate gently until reconstituted.

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>Diquat dibromide 85-00-7</td>
<td>TWA: 0.5 mg/m³ inhalable particulate matter  TWA: 0.1 mg/m³ respirable particulate matter S*</td>
<td>(vacated) TWA: 0.5 mg/m³</td>
<td>TWA: 0.5 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Chemical-resistant headgear, gloves and protective eyewear.

Skin and Body Protection
Chemical resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant footwear plus socks.

Respiratory Protection
Use respirator during mixing, loading and application.

General Hygiene Considerations
Users should remove personal protective equipment immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. REMOVE CONTAMINATED CLOTHING IMMEDIATELY. Launder contaminated clothing prior to reuse and separate from household laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product’s concentrate. Do not reuse them.

9. PHYSICAL AND CHEMICAL PROPERTIES
Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Dark brown liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
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<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Not determined</td>
<td></td>
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<tr>
<td>Odor Threshold</td>
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<td></td>
</tr>
<tr>
<td>pH</td>
<td>4.5-5.25</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
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<tr>
<td>Boiling Point/Boiling Range</td>
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<td></td>
</tr>
<tr>
<td>Flash Point</td>
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<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
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<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not applicable - liquid</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
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<tr>
<td>Upper Flammability Limit</td>
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<tr>
<td>Lower Flammability Limit</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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<td>Relative Density</td>
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<td>Water Solubility</td>
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<tr>
<td>Solubility in other solvents</td>
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<tr>
<td>Partition Coefficient</td>
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<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
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<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
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<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
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<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
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<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
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<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></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
Exposure to air or moisture over prolonged periods.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
Smoke, fumes or vapors, and oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye Contact
Causes eye irritation.

Skin Contact
Avoid contact with skin.

Inhalation
Toxic by inhalation. May cause respiratory irritation.

Ingestion
Harmful if swallowed.
### 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.

- **STOT - repeated exposure**: Causes damage to organs through prolonged or repeated exposure.

**Numerical measures of toxicity**

No data available

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

**Persistence/Degradability**

Not readily biodegradable.

**Bioaccumulation**

-4.6 @ 20°C

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

**Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Waste codes should be assigned by the user based on the application for which the product was used. For information on the 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**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Please review product label for Canadian container disposal requirements.

### 14. TRANSPORT INFORMATION

**DOT**

- **UN/ID No**: UN1760
- **Proper Shipping Name**: Corrosive liquid, n.o.s. (Diquat dibromide)
- **Hazard Class**: 8
- **Packing Group**: III
- **Special precautions for user**: Yes

**IATA**
**UN/ID No** | UN1760  
---|---
**Proper Shipping Name** | Corrosive liquid, n.o.s. (Diquat dibromide)  
**Hazard Class** | 8  
**Packing Group** | III  
**Environmental Hazard** | Yes

**IMDG**

**UN/ID No** | UN1760  
---|---
**Proper Shipping Name** | Corrosive liquid, n.o.s. (Diquat dibromide)  
**Hazard Class** | 8  
**Packing Group** | III  
**Marine Pollutant** | Yes

**TDG**

**UN/ID No** | UN1760  
---|---
**Proper Shipping Name** | Corrosive liquids, n.o.s. (Diquat dibromide)  
**Hazard Class** | 8  
**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>Diquat dibromide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diquat dibromide 85-00-7</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

#### SARA 313

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diquat dibromide</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

#### US State Regulations

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diquat dibromide 85-00-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Pesticide Registration Number** | Pesticide Control Product Reg. No. 32726
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
WARNING! HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED, AVOID INHALING/BREATHING DUST, SPRAYS, ETC. CAUSES SUBSTANTIALEYE INJURY AND SKIN IRRITATION. DO NOT GET IN EYES, SKIN OR ON CLOTHING. NEVER TRANSFER TO OTHER CONTAINERS. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

Difference between SDS and product label

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Label</th>
<th>SDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Harmful or fatal if swallowed</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>Acute toxicity – Inhalation</td>
<td>Harmful if inhaled</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes skin irritation</td>
<td>NA</td>
</tr>
<tr>
<td>Eye damage/ irritation</td>
<td>Causes substantial eye injury</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>STOT SE</td>
<td>NA</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>STOT RE</td>
<td>NA</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
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<tbody>
<tr>
<td>Health Hazards</td>
<td>Not determined</td>
<td>Not determined</td>
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<tr>
<td>Flammability</td>
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<td>Not determined</td>
<td>Physical hazards</td>
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<tr>
<td>Instability</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Personal Protection</td>
<td>Not determined</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