



Safety Data Sheet

Issue Date: 05-Mar-2024

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Version 1

1. IDENTIFICATION

Product identifier

Product Name Armory All In

Other means of identification

SDS # ADAMA-366-CA

Synonyms None

Registration Number(s) Pest Control Reg. No. 35143

UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use Herbicide

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial supplier identifier

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

Appearance Red brown to 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 2
Specific target organ toxicity (STOT) — single exposure	Category 3
Specific target organ toxicity (STOT) — repeated exposure	Category 1
Corrosive to Metals	Category 1

Signal word**Danger****Hazard statements**

Harmful if swallowed

Toxic if inhaled

Causes serious 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

Use only outdoors or in a well-ventilated area

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapours/spray

Keep only in original packaging

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 person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor

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

Rinse mouth

Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Store in corrosion resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Diquat dibromide	85-00-7	31.9335	-	-
Alkylamine ethoxylate	70955-14-5	1-5	-	-

4. FIRST AID MEASURES

Description of first aid measures

General advice	Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
Skin contact	Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a doctor. Wash contaminated clothing before reuse.
Inhalation	Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a doctor or poison control centre immediately.
Ingestion	S46 - If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms	Inflammation of the mouth, throat and esophagus. Gastrointestinal discomfort. Diarrhea.
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Indication of any immediate medical attention and special treatment needed

Note to doctors	Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution: 1 liter for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an adsorbent has not shown any clinical benefit. Eye contact: - Severe damage may be caused by apparently trivial contact and healing may be delayed. Medical supervision should continue until complete healing has occurred.
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5. FIREFIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Small Fire Large Fire	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Alcohol-resistant foam or water spray.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. Do not allow run-off from fire-fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Other Information Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see section 13). Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8. Spray solutions should not be mixed, stored or applied in containers other than plastic, plastic-lined steel, stainless steel or fiberglass.

Conditions for safe storage, including any incompatibilities

Storage Conditions No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

Incompatible materials Aluminium Mild steel Iron

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
Diquat dibromide 85-00-7	TWA: 0.5 mg/m ³ TWA: 0.1 mg/m ³	TWA: 0.5 mg/m ³ TWA: 0.1 mg/m ³	TWA: 0.5 mg/m ³ TWA: 0.1 mg/m ³ Skin	

Appropriate engineering controls**Engineering controls**

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL. Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Tightly fitting safety goggles. Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Hand protection

Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The breakthrough time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. Remove and wash contaminated clothing before re-use. Wear as appropriate: Impervious clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators. Suitable respiratory equipment: Respirator with a half face mask. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

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
Appearance	Red brown to dark brown liquid
Colour	Red brown to dark brown
Odour	Not determined
Odour Threshold	Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6.0	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Flash point	No data available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Lower flammability or explosive limits	No data available	
Vapour Pressure	Not determined	
Vapour Density	No data available	
Relative Density	1.202 g/cm ³ (25°C)	
Water Solubility	Soluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	>650 °C	
Decomposition temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive properties	Not determined.	
Oxidising properties	Not determined.	
<u>Other information</u>		
Softening Point	Not determined	
Molecular weight	Not determined	
VOC content	No data available	
Liquid Density	Not determined	
Bulk density	Not determined	

10. STABILITY AND REACTIVITY

Reactivity	See section "Possibility of hazardous reactions".
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Corrosive in contact with metals.
Conditions to Avoid	No decomposition if used as directed.
Incompatible materials	Aluminium. Mild steel. Iron.
Hazardous decomposition products	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye contact	Avoid contact with eyes.
Skin contact	Avoid contact with skin.
Inhalation	Toxic if inhaled.
Ingestion	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.
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Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	1,340.50
ATEmix (dermal)	>5000
ATEmix (inhalation-dust/mist)	>0.5

Unknown acute toxicity No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Diquat dibromide 85-00-7	= 214 mg/kg (Rat)	50 - 100 mg/kg (Rat)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Serious eye damage/eye irritation Causes serious eye irritation.

STOT - single exposure May cause respiratory irritation.

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

12. ECOLOGICAL INFORMATION

Ecotoxicity The environmental impact of this product has not been fully investigated.

Persistence/Degradability No information available.

Bioaccumulation No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from residues/unused products Refer to the product label for specific disposal/recycling information Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging Refer to the product label for specific disposal/recycling information. Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

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	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s. (Diquat dibromide)
Transport hazard class(es)	8
Packing Group	III

TDG

UN/ID No UN3265
 Proper Shipping Name Corrosive Liquid, Acidic, Organic, N.O.S. (Diquat Dibromide)
 Transport hazard class(es) 8
 Packing Group III

MEX

UN/ID No UN1760
 Proper Shipping Name Corrosive liquid, n.o.s. (Diquat dibromide)
 Transport hazard class(es) 8
 Packing Group III

IATA

UN number or ID number UN1760
 Proper Shipping Name Corrosive liquid, n.o.s. (Diquat dibromide)
 Transport hazard class(es) 8
 Packing group III

IMDG

UN number or ID number UN1760
 Proper Shipping Name Corrosive liquid, n.o.s. (Diquat dibromide)
 Transport hazard class(es) 8
 Packing Group III

15. REGULATORY INFORMATION

REGULATORY INFORMATION**International Regulations**

Ozone-depleting substances (ODS) Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AIIC
Diquat dibromide	X	X	X	X	X	X	X	
Alkylamine ethoxylate	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

AIIC - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards -	Flammability -	Instability -	Special hazards -
<u>HMIS</u>	Health hazards -	Flammability -	Physical hazards -	Personal Protection Not determined

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value
*	Skin designation

Revision Date: 05-Mar-2024

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