

SAFETY DATA SHEET: ADAMA 2,4 D AMINE 480 SL

Revision date: 19/04/2022

Version 2

Print date: 04/11/2022

1. IDENTIFICATION OF THE SUBSTANCE AND THE SUPPLIER

Product name: ADAMA 2, 4-D AMINE 480 SL
Other name: /
Recommended use of the chemical and restrictions on use Herbicide
Registration holder: **ADAMA South Africa (Pty) Ltd**
Ground Floor, Simeka House
The Vineyards Office Estate,
99 Jip de Jager Drive
Bellville
7530
Phone number: + 27 21 982 1460
Emergency phone number: Griffon Poison Information Centre: +27 (0)82 446 8946
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SPILL TECH®: +27(0)86 100 0366; +27 (0)83 253 6618

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Hazard Class	Category	Hazard Statement	Number
Acute Toxicity, Oral	4	H302	
Acute Toxicity, Dermal	5	H313	
Acute Toxicity, Inhalation	4	H332	
Skin Corrosion/Irritation	2	H315	
Serious Eye Damage/Irritation	1	H318	
Skin Sensitization	1	H317	
Specific target organ toxicity – Single	3	H336	
Aquatic Toxicity - Chronic	3	H412	

GHS Label elements, including precautionary statements:



Signal word:

DANGER

Hazard statement(s):

H302: Harmful if swallowed

H313: May be harmful in contact with skin

H332: Harmful if inhaled

H315: Causes skin irritation

H318: Causes serious eye damage

H317: May cause an allergic skin reaction

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H336: May cause drowsiness or dizziness

H412: Harmful to aquatic life with long lasting effects

Precautionary statement(s):

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P264+P265: Wash hands thoroughly after handling. Do not touch eyes.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves.

P301 + P317: IF SWALLOWED: Get medical help.

P302 + P317: IF ON SKIN: Get medical help.

P302 + P352: IF ON SKIN: Wash with plenty of water.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P354 + P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P317: Get medical help.

P319: Get medical help if you feel unwell.

P321: Specific treatment (see on this label)

P330: Rinse mouth.

P332 + P317: If skin irritation occurs: Get medical help.

P333 + P317: If skin irritation or rash occurs: Get medical help.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to in accordance with local/regional/national /international regulations.

Other hazards which do not result in classification: No data available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration(%)	Classification
2, 4-D	94-75-7	48	Acute Toxicity, Oral, Category 4. Acute dermal : Category 5 Acute inhalation : Category 4 Serious Eye Damage/Irritation, Category 1. Skin sensitization : Category 1. Specific target organ toxicity – Single: Category 3 Aquatic Toxicity, Chronic, Category 3.

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Dimethylamine	124-40-3	10.1	Acute oral : Category 4. Acute dermal : Category 5 Acute inhalation : Category 4. Skin Corrosion/Irritation, Category 2. Serious Eye Damage/Irritation, Category 1. Skin sensitization : Category 1. Aquatic Toxicity, Chronic, Category 3.
Water	7732-18-5	balance	/

4. FIRST AID MEASURES

Description of necessary first aid measures

Ingestion:

If swallowed, drink several glasses of water. DO NOT induce vomiting. Seek medical advice

Inhalation:

If ill-effects occur, move to fresh air.

Skin contact:

Flush area with large quantities of water.

Eye contact:

Flush with water for 15 minutes.

Antidote:

Not available

Most important symptoms/effects, acute and delayed

Not available

Indication of immediate medical attention and special treatment needed:

Treatment based on judgement of physician in response to symptoms of patient. If lavage is performed, suggest endotracheal and/or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Dry chemical, water spray (fog), foam or carbon dioxide

May be combustible at high temperature. Carbon oxides, Hydrogen chloride gas

Container may rupture from gas generation in a fire situation. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate. Dense smoke is produced when product burns.

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus for firefighting if necessary

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

Methods and materials for containment and cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin and eyes. Do not eat, drink, smoke or go to the toilet with pesticide-contaminated hands. Always wash hands thoroughly after handling pesticides or waste.

Conditions for safe storage, including any incompatibilities:

Do not store near sources of heat. Store in a dry, cool, well-ventilated warehouse in well labeled containers. Not to be stored next to foodstuffs and water supplies. Keep away from children and animals. Local regulations should be complied with.

Incompatible substances and mixtures: Refer to product label.

Packaging material: HDPE plastic containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:

Handle in well ventilated areas.

Personal protective equipment:

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air

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respirator. Use respirators and components tested and approved under appropriate government standards.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color etc.):	Yellow to Brown Liquid
Odor:	Characteristic
Odor threshold:	Not available
pH:	8.8
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	>100°C
Evaporation rate:	Not available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	1.15 g/ml
Solubility(ies):	Miscible
Partition coefficient: n-octanol/water:	Log P=-0.82
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

10. STABILITY AND REACTIVITY

Reactivity:

This product is unlikely to react or decompose under normal storage conditions.

Chemical stability:

The product is stable under recommended storage conditions.

Possibility of hazardous reactions:

Product unlikely to undergo polymerisation processes.

Conditions to avoid:

Store at low temperature conditions, below 50°C, preferably below 30°C and not for prolonged periods in direct sunlight.

Incompatible materials:

Strong oxidizing agents

Hazardous decomposition products:

Carbon monoxide, carbon dioxide, and hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Acute health effects:

Inhalation: May cause coughing, nose bleed, paleness, sweating, tearing, drooling, nausea, vomiting, diarrhea,

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stomach pain, involuntary defecation and/or urination, difficulty speaking, chest pain, difficulty breathing, headache, weakness, dizziness, confusion, loss of reflexes, twitching, mental disorders, blurred vision, dilated pupils or pin-point pupils, bluish skin color, lung congestion, paralysis, convulsions, unconsciousness, coma and heart failure. In addition to effects from short term exposure, lack of appetite, speech disorders, drowsiness, disorientation, sleeplessness and loss of memory may occur.

Ingestion: May cause lack of appetite, nausea, vomiting, diarrhea and stomach pain.

Skin: May cause irritation. Additional effects may include sweating and twitching.

Eyes: May cause irritation. Additional effects may include tearing, twitching of the eyelid, muscle spasm and dilated pupils or pin-point pupils.

Numerical measures of toxicity:

Acute oral LD50:	942.5mg/kg
Acute dermal LD50:	4589.3mg/kg
Acute inhalation LC50:	2.94 mg/L
Skin irritation:	Category 2.
Eye irritation:	Category 1.
Skin sensitization:	Category 1.
Germ cell mutagenicity:	Not available
Carcinogenicity:	Not available
Reproductive toxicity and Developmental toxicity:	Not available
Specific target organ toxicity (single exposure):	Category 3
Repeated dose toxicity and Specific target organ toxicity (repeated exposure):	Not available
Aspiration hazard:	Not available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Birds - Acute LD50	668 mg/kg in Japanese quail:
Birds - Short term dietary (LC50/LD50)	> 5620 mg/kg in Mallard ducks
Fish - Acute 96 hour LC50	>110mg/L in Rainbow trout
Daphnia magna - Chronic 21 day LC50	235 mg/L
Algae - Acute 72 hour EC50, growth	>100 mg/L
Honeybees-Oral acute 48 hour LD50	>100 µg/bee

Persistence and degradability:

2,4-D has low soil persistence. In soil, micro-organisms are responsible for degradation of 2,4-D. Half-life is less than 7 days.

In aquatic environments, micro-organisms readily degrade 2,4-D. Under oxygenated conditions half-life is 1 week to several weeks.

Bioaccumulative potential:

BCF=10 l/kg, Low potential to accumulate

Mobility in the soil:

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Rapid degradation in soil prevents significant downward movement under normal conditions.

Other adverse effects:

Harmful to aquatic life.

Avoid release to the environment

13. DISPOSAL CONSIDERATIONS

Safe handling of waste residues and disposal methods:

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Dispose of contaminated packaging as unused product.

14. TRANSPORT INFORMATION

UN number:

Not applicable.

UN proper shipping name:

Not applicable.

Transport hazard class(es):

Not applicable.

Packing group, if applicable:

Not applicable.

Marine pollutant (Yes/No):

Not applicable.

Special precautions for user:

Not applicable.

15. REGULATORY INFORMATION

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and /or local laws.

16. OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.