

RESTRICTED USE AGRICULTURAL REMEDY: THIS REMEDY IS RESTRICTED DUE TO ACUTE TOXICITY. THIS REMEDY MAY ONLY BE SOLD TO AND USED BY A REGISTERED PEST CONTROL OPERATOR, OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR, AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION, AND ONLY AS DIRECTED ON THIS LABEL.

ADAMA QUAT


Reg no L11052 Wet / Act 36 / 1947
N-AR 2166



**READ ATTACHED PACKAGED LEAFLET BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

GROUP	D	HERBICIDE
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<p>A soluble concentrate herbicide for the control of annual grasses and broadleaf weeds in crops as listed and for fire breaks. Inactivated on contact with the soil.</p>	<p>'n Oplosbare konsentraat onkruidodder vir die beheer van eenjarige grasse en breëblaaronkruid in gewasse soos aangedui en vir brandbane. Geïnaktiveer na aanraking met grond.</p>
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 <p>DANGER</p>	<p>Hazard statements Toxic if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Fatal if inhaled. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.</p> <p>Precautionary statements Wear protective gloves; protective clothing; eye protection and face protection. Avoid release to the environment if this is not the intended use and collect spillage.</p>
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ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

Paraquat ion (bipyridyl)	200 g/LParakwatioon (bipiridiel)
(as dichloride)	276 g/L	(as dichloried)

NET VOLUME/NETTO VOLUME

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REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty) Ltd;
Reg. no. 1992/001741/07
Ground Floor, Simeka House
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IN CASE OF POISONING, CALL THE FOLLOWING NUMBERS:

Griffon Poison Information Centre:
+27 82 446 8946 or
Tygerberg Poison Information Centre:
+27 861 555 777

EMERGENCY NUMBER:

SPILL TECH: +27 86 100 6366 or +27 83 253 6618

Batch number
Date of manufacture
Expiry date

UN no:3016

Lotnommer
Datum van vervaardiging
Vervaldatum



GHS information

WARNINGS

- Toxic if swallowed.
- Harmful in contact with skin.
- Causes skin irritation.
- Causes serious eye irritation.
- Fatal if inhaled.
- May cause respiratory irritation.
- Causes damage to organs through prolonged or repeated exposure.
- Very toxic to aquatic life with long lasting effects.

- KEEP LIVESTOCK OUT OF TREATED AREA FOR 3 WEEKS.
- Handle with extreme care.
- Moderate to severe irritant to skin and eyes.
- Store in original container, in a cool, dry place.
- Store under lock and key and out of reach of children, uninformed persons and animals.
- Store away from food, feeds, fertilizers, seed and drink water.
- **ADAMA QUAT** is highly toxic if swallowed and can cause death.
- Never repack from this container.
- Toxic to wildlife.
- **Re-entry:** Do not enter treated area within 2 days after treatment unless wearing protective clothing.

Although this remedy has been tested extensively under a large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weed against the remedy concerned as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier or registration holder in the event of any uncertainty.

PRECAUTIONS

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Avoid release to the environment if this is not the intended use and collect spillage.
- Use only outdoors or in a well-ventilated area.

- Wear protective gloves, protective clothing, respiratory protection and eye and face protection.
- Wear respiratory protection.
- Do not eat, drink or smoke when using this product.
- Call a POISON CONTROL CENTRE or doctor if you feel unwell.
- Wash hands, forearms and face thoroughly after handling. Do not touch eyes.
- IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor. Rinse mouth. Specific treatment (see supplemental first aid instruction on this label).
- IF ON SKIN: Wash with plenty of water. Specific treatment (see supplemental first aid instruction on this label). Get medical help.
- Take off contaminated clothing and wash it before reuse.
- If skin irritation occurs: Get medical help.
- 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 help.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Specific treatment is urgent (see supplemental first aid instruction on this label). Immediately call a POISON CONTROL CENTER or doctor.
- Store locked up in a well-ventilated place. Keep container tightly closed.
- Keep only in original packaging.
- Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

- Prevent spray drift onto other crops, grazing, rivers, dams and any area not under treatment. Prevent contamination of food, feeds, drinking water and eating utensils. Wash equipment after use, using a wetting agent.
- Dispose of wash water in a safe manner.

IMPORTANT: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container *three times* in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za).

Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

RELEVANT SUBSTANCES

Chemical name	w/w %	CAS no.
Paraquat Dichloride	>60%	1910-42-5
A fatty alcohol polyglycol ether	<10%	9043-30-5

FIRST AID

Remove the patient from the exposure area and keep the patient warm and at rest.

Take the container label or product name with you when seeking medical attention.

Eye contact: Flush eyes with lukewarm, gently flowing water for at least 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. If irritation, redness or burning sensations develop, get medical attention immediately.

Skin contact: Remove contaminated clothing, shoes and leather goods immediately. Wash contaminated areas with soap and water. Paraquat can be absorbed through damaged skin. Emergency personnel should wear gloves and avoid contamination. If irritation persists, get medical attention immediately.

Inhalation: Get medical attention immediately. **Do not administer supplementary oxygen.**

Ingestion: Do not induce vomiting. Wash mouth with water and give the patient water to drink. **Seek medical advice immediately.**

TOXICOLOGICAL INFORMATION

Note to physician

Rapid treatment is essential. Wash out stomach and test urine and gastric aspirate, if clear, for presence of paraquat. Give the patient up to 1 litre of 15 % aqueous suspension of Fuller's Earth, orally or via gastric tube, together with suitable purgative (200 ml of aqueous solution of mannitol). Repeat administration of absorbent plus purgative until absorbent is seen in stools. This should normally take between 4 to 6 hours after start of treatment.

Do not administer supplementary oxygen.

Symptoms of human poisoning

Discomfort/pain in the upper abdomen, burning sensation in upper gastro-intestinal tract, weakness, nausea, vomiting. At higher doses, other toxic effects include thirst, shortness of breath, rapid heart rate, renal failure, lung damage, liver injury, convulsions and eventually death.

RESISTANCE WARNING

ADAMA QUAT is a group code D (bipyridyl) herbicide. Any weed population may contain individual weeds naturally resistant to **ADAMA QUAT** and other group code D herbicides. Resistance of *Lolium rigidum*, *Conyza bonariensis* and *Plantago lanceolata* to the active ingredient of paraquat has been observed in South Africa. If a paraquat treatment has been ineffective in the control of the above-mentioned weeds, do not re-treat with a herbicide containing the same active-ingredient. Resistant individuals can eventually dominate the weed population if these herbicides

are used repeatedly. Resistant weeds may not be controlled by **ADAMA QUAT** or any other group code D herbicides.

In order to delay herbicide resistance:

- Avoid the exclusive and repeated use of herbicides from the same herbicide group code.
- Alternate or tank mix with products from different herbicide group codes.
- Integrate chemical and cultural control methods into weed control programmes.

For more information on resistance management, contact the registration holder of this product

MODE OF ACTION

D: PS I electron diversion.

RESTRICTED USE

Use only as directed.

Mix the required amount of **ADAMA QUAT** with clean water in a spray tank. Add non-ionic wetting agent for best results at three times the rate advised on the label for fungicides. Apply by ground sprayer in 200 to 500 L water. Use a high volume and high dosage rate for spraying dense weed growth. Ensure good weed cover. Do not spray buds or green parts of any crop. **ADAMA QUAT** kills green tissue but does not harm mature bark. It is inactivated rapidly on contact with the soil and has therefore no residual action.

APPLICATION RATES

CROP	DOSAGE L/ha	REMARKS
Afforestation	2.5 – 3.75 L	Spray around young trees with a special appliance.
Bananas, tea & coffee	1.25 – 5.0 L	Apply through a low pressure floodjet nozzle.
Citrus, avocados, pecans, papayas, etc.	1.25 – 5.0 L	In citrus only, ADAMA QUAT can be mixed with a suitable residual herbicide.
Deciduous fruit	2.5 – 5.0 L	Spray as necessary from Spring onwards. Pome fruit only: Mix with simazine for residual effect.
Fire break	2.5 – 3.75 L	Two months before the onset of the fire season: Spray a 1 to 2 m wide band (the sparser the vegetation, the wider the band) on both sides of a 5 to 12 m wide untreated strip (or about 10 m from a road or canal). Burn the sprayed bands 3 weeks later, while the unsprayed areas are still green and unburnable. The strip in between can be burned relatively safely after the first frost or drought when the vegetation in the strip has dried out.



ADAMA

Listen · Learn · Deliver

CROP	DOSAGE L/ha	REMARKS
Industrial areas Young weeds Mature weeds	2.5 L 5.0 L	Use 500 to 1000 L water/ha depending on density of vegetation.
Lucerne (> 6 months old)	2.5 – 5.5 L	Apply just before dormancy breaks or after cutting before regrowth of lucerne occurs.
Minimum cultivation	1.5 – 4.0 L	Apply before or just after planting annual crops. May be mixed with a corresponding residual herbicide.
Potatoes (haulm destruction)	2.5 – 5.0 L	Use 200 to 500 litres water/ha. Do not apply if haulms show signs of wilting as tuber damage may occur. Spray ONLY when at least 5 hours of intensive sunshine are expected to follow.
Sugarcane	1.5 –3.0 L	Directed post-emergence in plant and ratoon cane. Should the spray come into contact with green cane leaves scorching will occur, but this is only a temporary effect. Other suitable herbicides may be added for residual effect.
Vegetables (grown in rows)	1.25 – 2.5 L	Use a knapsack sprayer with suitable shield to protect all parts of the crops from spray mist.
All crops Stale seedbed method	1.25 – 2.0 L	Prepare seedbed with fertilizer, irrigate and let the weeds emerge to cover the surface. Spray and sow within 3 days without reworking the seedbed. This method is especially useful for crops for which no other herbicide has yet been registered, e.g., lettuce, chickory and cucurbits. These crops may also be sown a few days before spraying.
Vineyards	2.5 – 5.0 L	Apply overall when weeds are 10 to 15 cm high before bud burst of the vines. Subsequently as a directed spray.

WEEDS CONTROLLED

All above-ground green tissue of actively growing plants is killed off by **ADAMA QUAT**. Annual weeds are well controlled. Weeds with reserves stored underground, recover, e.g., sedges, bulbs, Gousblom, Oxalis, Kikuyu, etc.