

IRRIGATION CLEANER



RECICLEAN[®]

Reciclean W1 contains 35% hydrogen peroxide + stabilisers

Reciclean W2 contains 15% formic acid + stabilisers

Keeps irrigation systems clean and free from blockages.

Prevents build up of inorganic and organic deposits.

Dissolves and decomposes existing organic and inorganic deposits. Dissolves calcium deposits in the pipework and drippers.

Environmentally friendly; breaks down to water, oxygen and carbon dioxide.

Oxygenates the water encouraging stronger root growth.

Not harmful to plants when used as directed.

fargro[®]

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ALWAYS READ THE LABEL BEFORE USE

RECICLEAN

- Mixing the components together produces performic acid, which is up to 1000 times more effective than hydrogen peroxide. It is an excellent cleaning agent for irrigation lines and drippers. Clean irrigation lines enable more consistent watering, fewer stressed plants and more control over plant growth.
- Can be used to treat the water in the irrigation lines and drippers whilst the crops are in situ.
- The products in RECICLEAN decompose, turning into water, oxygen and carbon dioxide. There are no harmful residues either in the plants or in the environment.
- Can be beneficial to the plants because their roots are provided with additional oxygen helping to stimulate growth.

WHAT IS RECICLEAN AND HOW DOES IT WORK

RECICLEAN is supplied in two containers, RECICLEAN W1 (containing 35% hydrogen peroxide + stabilisers) and RECICLEAN W2 (containing 15% formic acid + stabilisers). The two products are mixed together in equal volumes and left for at least 8 hours before use in order that a performic acid mixture is formed. This mixture is then dosed into the irrigation water.

The activated RECICLEAN or performic acid mixture is able to dissolve organic and inorganic matter in the treated water. As the dosed RECICLEAN works it also breaks down into water, oxygen and carbon dioxide leaving no harmful residues. Oxygen produced can be beneficial to plant roots stimulating growth.

Activated RECICLEAN mixture slowly starts to decompose and should be used within 7 days of mixing.

As RECICLEAN is acidic it should be dosed directly into the pressure line after the water pump but before the pH probe, after the addition of fertiliser.

RECICLEAN can be used with plants in situ whether they are grown in soil, compost, rockwool or NFT.

ProMinent Dosing Pump



It is important to apply RECICLEAN accurately into the irrigation system in order that best effect can be achieved with the minimum of wastage. Fargro Ltd. recommend the ProMinent dosing system where the pump is linked to a water flow meter to ensure accurate dosing.

DIRECTIONS FOR USE

Note: Reciclean should not be used unless a suitable dosing system including mixing vessels and containers have been fitted. (Contact FARGRO for further details).

Preparation of RECICLEAN

1. Mixing vessels, pipes and tubing must be made of PVC, HDPE, PVDF or PP and seals of Viton B or PTFE.
2. All contact with metal parts **must** be avoided.
3. New mixing vessels should be washed out with 10% nitric acid before use.
4. RECICLEAN W1 and W2 are mixed 1:1 (vol/vol). Add W2 to the mixing vessel first.
5. Ideally leave for a minimum of **8 hours** to allow for full reaction time.
6. After 8 hours RECICLEAN is ready for use.
7. RECICLEAN does not need to be diluted.
8. In case you wish to dilute RECICLEAN, do this after the 8 hour reaction time. Use only tap water for dilution.
9. Adjust pump to give desired dosing - see 'Rate of Use'.
10. After 1 week RECICLEAN starts to slowly decompose. Therefore when preparing RECICLEAN ensure that the maximum amount mixed will not last for more than **7 days**.

Rates of Use

1. To keep irrigation lines clean and clear of deposits RECICLEAN mixture is applied at 125 ml/m³ (125 ml/1000 l) of water giving 25 ppm of hydrogen peroxide (H₂O₂).
2. Where irrigation lines need to be cleared of deposits quickly then the rate of use can be increased up to 50 ppm H₂O₂, 250 ml/m³ (250 ml/1000 l) of water.
3. Test the concentration of H₂O₂ at the end of the irrigation lines and drippers using Merck 315142K peroxide test strips, the level should not fall below 10 ppm H₂O₂ when dosing at 25 ppm.

When to Use

Ideally, begin using RECICLEAN when the irrigation system is clean, as it will keep the system clean throughout the growing season. RECICLEAN can be used to clear blocked lines but deposits within the irrigation lines will be loosened and any loose particles in the lines will need flushing out until clear. It is important to flush or vacuum the system at least once a week to prevent loosened particles from clogging drippers. This is normal for the first 8 weeks but this may be more if the lines had severe deposits in them.

The normal rate of use gives 25 ppm H₂O₂. Under some conditions a higher rate of 50 ppm may be desirable. This rate will clean the irrigation lines faster but there is a risk that larger deposits will loosen and therefore flushing through needs to be increased to several times a week to prevent drippers from blocking until lines are clear.

Crops and Frequency of Use

Edible Protected Crops: *Dripper Watering:* (e.g. cucumbers, peppers, tomatoes). During the summer period when there is a high demand for water a time clock can be used to limit dosing at times when the material is not held in the irrigation pipes for any length of time. However if there are less than 5 waterings per day dose at every watering.

Ornamental Crops: Not usually irrigated more than twice a day therefore apply at every watering.

Recycled Irrigation water: Requires dosing with RECICLEAN continuously into the return pipe at 100 ppm H₂O₂ ensuring that the diluted irrigation water does not exceed 30 ppm H₂O₂.

IMPORTANT SAFETY POINTS

Important safety points to remember when handling RECICLEAN:

1. Never pour mixed product or components back into original containers.
2. **DO NOT** store in direct sunlight or near heat as this may cause decomposition and an increase in temperature.
3. Store RECICLEAN mixture and the two components in a dark, cool place.
4. After mixing ensure the container is covered or shaded to prevent light entering (ensure ventilation is present).
5. Never allow the concentrated RECICLEAN solution to come into contact with metal. When mixing **DO NOT** use any metal containers or implements (e.g. stirrers). No metal should have direct contact with RECICLEAN. Therefore make sure all pipe-work and/or pumping equipment are clear of metal.
6. Always wear face and eye protection, as well as acid proof gloves and overalls when handling the product.
7. When handling the concentrated RECICLEAN solution remove any watches, jewellery or any other metal objects to prevent them falling into mixing container. If wearing metal glasses either remove or cover with plastic goggles.
8. Plastic should be made of PE (HD), PVC (HD), polypropylene (PP), FKM (Viton B) or Teflon coated.
9. All RECICLEAN dosing and mixing equipment must be clean and free of organic deposits or metals to prevent a reaction and increase in temperature of the RECICLEAN mixture
10. Ensure the mixing container is ventilated and do not place directly on or under metal including floor grids, heating pipes or other metal framework.
11. Use vented vessels to prevent gas or heat build up.
12. **IF THE TEMPERATURE OF THE MIX RISES, DILUTE IMMEDIATELY WITH WATER.**

STORAGE

Store only in the original packaging tightly closed and in a well ventilated dark and cool place.

Do not store RECICLEAN W1 and W2 together.

Keep locked up and preferably on the ground.

Keep out of reach of children and animals.

Keep in a cool place.

PRECAUTIONS

RECICLEAN W1 contains hydrogen peroxide + stabilisers; RECICLEAN W2 contains formic acid + stabilisers.

CORROSIVE.

Causes burns.

Do not breathe vapour.

Wear suitable protective clothing and eye or face protection.

After contact with skin wash immediately with plenty of water.

In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

In case of accident or you feel unwell seek medical advice immediately (show label where possible).

RECICLEAN W1

Contains 35% Hydrogen peroxide (and stabilisers).



CORROSIVE

CAUSES BURNS

KEEP IN A COOL PLACE.

AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER.

WEAR SUITABLE PROTECTIVE CLOTHING AND EYE/FACE PROTECTION.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW LABEL WHERE POSSIBLE).

RECICLEAN W2

Contains 15% Formic acid (and stabilisers).



CORROSIVE

CAUSES BURNS

KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.

DO NOT BREATHE FUMES.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW LABEL WHERE POSSIBLE).

Manufactured by :

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Distributed in the UK by Fargro Ltd.

Pack size: Reciclean W1: 20 litres
Reciclean W2: 20 litres

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