AIX 6.0

REHABILITATION AGENT

chloride-free non-corrosive efficiency > HCI



pH CONTROLLED

AIXTRACTOR[®] 6.0

REMOVAL OF MIXED DEPOSITS - PRIVATE IRRIGATION WELLS

- Crystalline concentrate ready-to-use
- Transformation of insoluble incrustation in soluble form:
 - Iron (FE₂O₃)
 - Manganese (MnO₂)
 - Carbonate (CaCO₃)
 - Sulphide (e.g. Fe₂S₃)
- Restoration of original well capacity
- Extension of production time
- Reduction of pumping costs by regular maintenance
- Protective inbuilt inhibitors

- No corrosive impact on stainless steel, gaskets and synthetic materials
- Faster chemical reaction than by any other proton-assisted dissolution
- Dosage and reaction time as per type and volume of incrustation
- Continuous process monitoring and control by pH value
- Short reaction time of 8 hours
- Water Hazard Category 1 (0 non-existent)
- Successful implementation worldwide since 2002





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1. DECLINE OF WELL YIELD

Water wells are often affected by natural ageing over time causing a more or less rapid decline of the yield. The pore channels surrounding the screen and the adjacent geological formation become more and more clogged mostly by mineral incrustations preventing the groundwater flow.

AIXTRACTOR® 6.0 is an inorganic, highly reactive and efficient chemical agent for the removal of incrustations consisting of iron, manganese and carbonates in $5/4^{\circ} - 2^{\circ}$ irrigation wells. Consequently a search for a new well site and the cost of a new well can be avoided.

The working principle of AIXTRACTOR® 6.0 combines the effect of an acid with the chemical reduction of relatively poorly soluble iron(III) and manganese(IV) oxides in their respective highly soluble iron(II) and manganese(II) ions. Poorly soluble carbonates are transformed in soluble calcium (Ca²⁺) and carbon dioxide (CO₂) dissolving them completely.

As AIXTRACTOR® 6.0 contains protecting inhibitors against corrosion, it can be applied on all types of well construction and screen materials such as stainless and zinc-coated steel. AIXTRACTOR® 6.0 is classified in Water Hazard Category 1 (0 does not exist).

2. MIXING AIXTRACTOR® 6.0 WITH WATER

AIXTRACTOR® 6.0 is delivered as a ready-to-use crystalline concentrate. First of all the height of the water column is measured by inserting a dry pipe/tube in the well.

Dosage irrigation wells 5/4"- 2":

Height of water column 1 - 2 m = quantity recommended 500 g

Height of water column 2 - 4 m = quantity recommended 1000 g

The mixing ratio of 1:10 gives a volume of 5 or 10 liters of the rehabilitation agent. Protective clothing, goggles and safety gloves must be worn at all times. It is also imperative to comply with the requirements of the Material Safety Data Sheet.

Prior to the injection in the well it is diluted in clean groundwater. The mixing takes place outdoor, preferably with tailwind. The agent is added slowly in water under constant stirring in order to prevent clumping. As soon as the agent has been dissolved, the rehab solution is ready to react in the well. Both a slight turbidity and potential odour can occur.

WARNING:

Never dissolve AIXTRACTOR® 6.0 in any kind of reducing or oxidizing substances (e.g. AIXTRACTOR® 1.0/2.0, hydrogen peroxide, hypochlorite, sodium hypochlorite). This does not lead to more effectiveness but instead would cause the decomposition of the agent and as consequence develop toxic gas.

3. INJECTION OF THE MIXED REHABILITATION AGENT

The entire prepared rehab solution is injected in the well through a funnel pipe. It is imperative to avoid the proximity of the well opening while pouring the solution in the funnel as it can splash back or foam up due to the chemical reaction.

The well must remain open during a reaction time of 8 hours.

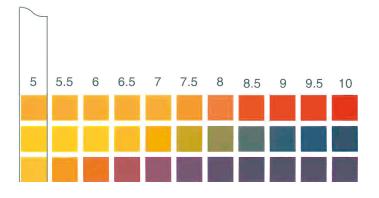
4. DISCHARGE OF THE DEPLETED REHAB SOLUTION

There is no formation of chemically or microbiologically critical secondary substances or reaction products during the dissolution process. The depleted rehab solution contains dissolved well incrustations including iron (Fe^{2+}), manganese (Mn^{2+}), calcium (Ca^{2+}) and carbon dioxide (CO_{2}) in addition to released organic compounds.

The depleted rehab solution has a milky yellow-green color during the discharge. The clear pumping of the well should be continued until the water is free of particles.

The depleted rehab solution has to be neutralised or diluted prior to the disposal in the sewage. It has proven useful to pump 10 l of depleted rehab solution from the well into a container, add 10 l of fresh water and measure the pH value using pH test strips.

If the pH of the solution is less than 6.5, it must be adjusted to pH 6.5 to 8.5 before the disposal (neutralization = pH 7).



SAFETY INSTRUCTIONS:

Keep out of the reach of children!



Signal word Attention

Hazard warnings

H315 causes skin irritation H319 causes serious eye irritation H412 harmful to aquatic organisms

Safety instructions

P273 avoid the release in the environment

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P302 + P352 IF ON SKIN: wash with plenty of water

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove any contact lenses that may be present. Continue rinsing.

P501 P501 Dispose of contents / container to in accordance with local regulations.

All information is based on our current level of knowledge, but does not represent any assurance of product properties and does not establish a contractual legal relationship.