

Exterior Scale Inhibitor

The Salt-Free Alternative



Water For Health, Beauty and Home

Contact Us For Further Details!

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Reduces Calcium Deposits

Works to suspend the calcium in the water so it will not create scale buildup or stick to pipes and appliances. This extends the life and efficiency of fixtures, hot water heaters, ice-makers, dishwashers, shower heads and other water equipment.

Removes Existing Scale

Scale buildup in your plumbing, water, heater and fixtures is softened and eventually removed. Heating systems perform more efficiently because of better heat transfer. The cost of electricity and/or gas is reduced.

Doesn't Change Water Feel and Taste

The *Catalytic Water Conditioner* does not make the water feel slimy like standard water softeners; soap rinses off easily without persistent residue. It does not add a salty or metallic taste to the water.

Requires No Salt or Chemicals

When compared to a water softener, the *Catalytic Water Conditioner* will save you money on equipment, salt and maintenance costs. Also, it never wears out!

Simplifies Cleaning

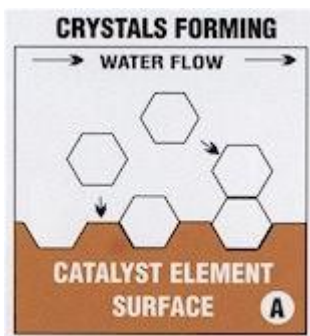
Catalytic Water Conditioners significantly reduce the requirements for soaps, detergents and cleansers. Cleaning lime spots and calcium deposits from fixtures, shower doors and tubs is much easier. Dishes look cleaner and brighter. Residue wipes away quickly without the need for solvents and other harsh cleaning products.

Promotes Plant Growth

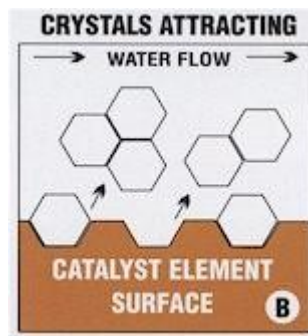
Plants need good water too! In agricultural applications, catalytic conditioners are used to help plants grow faster, healthier and greener because they are able to absorb more nutrients. Water penetrates deeper into the soil. The need for watering and use of fertilizers is substantially reduced- saving money!

Fights Pollution

With a *Catalytic Water Conditioner* you take part in the fight against water and soil pollution by decreasing the amount of sodium and other chemicals introduced into the environment.



Hard water entering the *Catalytic Water Conditioner* inlet flows across the highly engineered catalyst element. The surface of this catalyst element consists of millions of bi- and tri-metallic junctions similar in geometry to calcium carbonate (CaCO_3), the dissolved mineral that makes water hard. Through a phenomenon called lattice matching, minerals attach to each other and form crystals. Minerals in solution can also be made to attach to other surfaces with similar lattice patterns. Calcium carbonate collects onto these catalyst element junctions. (See diagram A)



These deposits form microscopic crystals that are less stable, but still attractive to the calcium carbonate that remains in solution. This process is called nucleation and is very familiar to those scientists who work in the areas of semi-conductors, physical chemistry and metallurgy. These crystals grow to a size between .0000004" and .000004", which is too small to be seen with an optical microscope. Then they are flushed off the catalyst surface due to the combination of crystal instability and the shearing force of the flowing water. Billions of these calcium carbonate crystals, or calcite seeds, are now in the treated water exiting the *Catalytic Water Conditioner*. (See diagram B)



These billions of calcite seeds appear to be more attractive to dissolved calcium carbonate than those surfaces. (See diagram C)