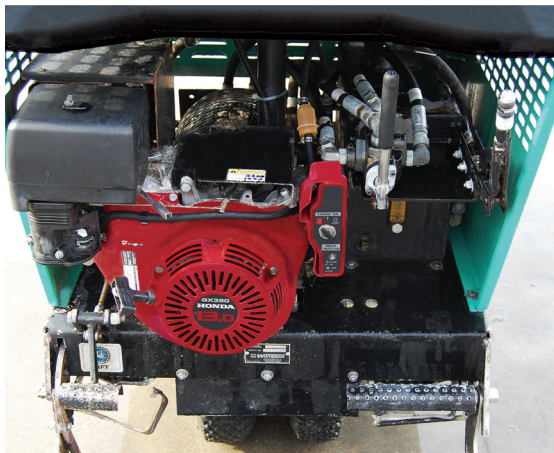
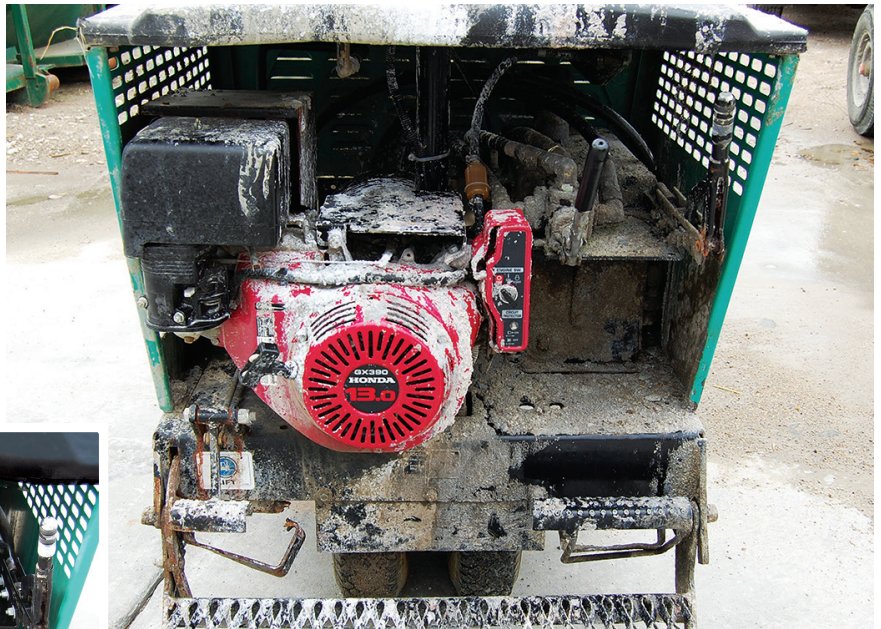


Safe Alternatives to **MURIATIC ACID**

By nature a tough material, concrete's strength is ... well, its strength. But when it comes to maintaining and cleaning your tools that strength can be a problem.



◀ What a transformation! The organic acid based concrete remover was sprayed away with a power washer and this power buggy is looking good as new.

Photo Credit: Nox-Crete

These precautions tend to make muriatic acid sound like a pretty dangerous chemical; that's because it is.

In addition to the health and safety concerns, muriatic acid is extremely corrosive to all metals to include steel, aluminum, magnesium, copper, zinc and all galvanized surfaces. Additionally, muriatic acid will cause the immediate formation of flash rust on all exposed steel surfaces. Electrical connections and contacts can quickly corrode when exposed to even dilute concentrations of muriatic acid. Frequent use and exposure to muriatic acid naturally increases the health and safety risks to you and your team.

▲ This power buggy is covered in concrete buildup and splatter and is typical of equipment used in the concrete construction industry.

Photo Credit: Nox-Crete

Removing concrete buildup and splatter is a real chore. You can use a sandblaster. You can chip away at it with a hammer. Many turn to chemicals like muriatic acid.

THE TRUTH ABOUT MINERAL ACIDS

Sure, muriatic acid (or hydrochloric acid) can effectively clean cement products like concrete and mortar but using it also requires following a long list of safety precautions. First of all, you need to protect your body. This means

thick rubber gloves, safety goggles, long sleeves and pants (preferably of chemical-resistant PVC), an apron, and a respirator. Secondly, you need to protect your lungs from the toxic fumes (the more concentrated the acid, the stronger its fumes) which can damage lung tissue, and in extreme cases, cause death. To avoid lung damage, ensure adequate ventilation and wear a personal respirator approved by the National Institute for Occupational Safety and Health (NIOSH). Finally, work slowly and carefully with this product to avoid accidents and always keep it away from children.

What a lot of folks don't know is that there are alternatives to muriatic acid that are actually more effective, and also safer and easier to use.

THE TRUTH ABOUT ORGANIC ACIDS

Organic concrete removers use natural organic acids derived from sugar beets to dissolve caked-on concrete quickly and easily. The health and safety advantages of using organic acid based cleaners vs. muriatic acid to clean your tools and equipment are undeniable. Organic acids have no odor or fumes so respirators aren't needed. They won't burn your lungs or your skin, and won't cause serious injury or death. The absence of any mineral acid means you have less to worry about when it comes to protecting yourself compared to using muriatic acid. However, when using any acids it's never a bad idea to wear gloves and protective eye wear.

Environmental friendliness is another reason to opt for an organic acid based concrete remover. Because organic acid based cleaners are biodegradable, there are no negative effects on the environment, even if the acid seeps into the soil. Muriatic acid, on the other hand, is non-biodegradable. It may evaporate from the surface, but a lot of it will remain in the soil where it's harmful to wildlife and water sources.

There are many other advantages to using organic acid based concrete removers. One is that they're non-corrosive and won't damage your forms, tools, screeds, pumps, trucks and equipment. They're gentle and effective and will save your equipment from the corrosion and rust brought on by other attempts at concrete removal. Just think what sandblasting, chiseling, and harsh acid does to your



tools and equipment over time ... costly damage that can be avoided.

Organic acid based concrete removers typically contain a powerful detergent that cuts through grease, oil, dirt, and exhaust soot so they'll be suitable for a wide range of applications. They can be applied using a foamer which creates a thick foam that clings to vertical surfaces allowing for the fast removal of concrete buildup and splatter.

THINGS TO LOOK FOR IN AN ORGANIC ACID BASED CONCRETE REMOVER

- Contains no mineral acids
- Foam formula that adheres to vertical surfaces as well as horizontal
- Safe for use on all surfaces to include aluminum, steel, magnesium, plastic, rubber and glass
- PH-sensitive dye that turns transparent to indicate it is done working
- Ready-to-use formula for easy application
- Meets all federal and state VOC requirements

There are a few things to keep in mind if you're considering an organic acid based concrete remover. These products generally perform optimally at temperatures above 50 degrees

▲ A hand pump foamer was used to apply the organic acid based concrete remover to all surfaces of the power buggy, including the motor and electrical components.

Photo Credit: Nox-Crete

Fahrenheit. To avoid rapid evaporation, it's best to apply them when the sun is at a low angle so plan to use them in the morning or evening rather than mid-day. Organic acid based products can cut through thick layers of dried concrete but multiple applications might be required. This can be true for any product including muriatic acid.

Making the switch from harsh mineral acid based chemicals to a gentler, safer, environmentally friendly organic acid based product is easy when there are great products available. Once you see how effectively you can clean your tools and equipment with an organic acid based product, you'll never want to mess with harsh mineral acids again.

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