



Acid Washing Procedure

When Muriatic Acid is being used, care must be taken to protect the operator from both the liquid and the fumes. Proper safety precautions must be exercised. Use plastic safety glasses, rubber gloves, and protective clothing. When mixing Muriatic Acid with water, ALWAYS POUR THE ACID INTO THE WATER. Use a plastic or porcelain lined container. Muriatic Acid will corrode metal. A concrete surface to be acid etched must be free of grease, oil, and similar contaminants. If present, they will insulate the concrete from the acid.

Muriatic Acid will not remove grease, oil or paint from a concrete surface - it is not intended to be used as a concrete cleaner. The concentration of Muriatic Acid required to etch concrete varies depending on the concrete texture and degree of etching needed. Hardened or very slick steel - toweled floors, for example, may require a higher concentration of acid to effectively etch the surface.

Start with a solution of 20 parts water to 1 part 32% acid. Apply to small area of concrete as a test. Acid should bubble and fume on concrete surface. If there is no reaction, add small quantities of acid to the water / acid solution already prepared and repeat the testing process until a reaction occurs and the desired amount of etching takes place. When testing is complete and the acid solution is ready for use, the concrete area to be etched is normally marked off in sections and the acid solution is applied and allowed to bubble. Areas not showing bubbling of the acid indicate a contaminant on the surface that prevents contact of the concrete by the acid. Some very dense, smooth surfaces may need more than one application of acid. The most important requirement in acid etching is surface cleaning after the acid etch.

The spent acid, together with the salts formed by the reaction, must be completely removed by scrubbing with a stiff - bristle broom or brush and copious water rinsing. The final rinse should be checked for pH before the surface is allowed to dry to verify that all acid residues have been removed. A properly etched surface should have the texture of fine to medium grit sandpaper.

NOTE: Water only dilutes muriatic acid. To neutralize the muriatic acid, use bicarbonate of soda, baking soda, soda ash, or lime. These neutralizing products can then be disposed of as any other floor sweep would be disposed of.

HA

PROPERTIES

Formula Cl

Molecular Weight 6.47

Specific Gravity .15

Boiling Point 180°C

Bulk Density 9.67 lbs / gal

Freezing Point 74°C

Color Colorless to light yellow

Solubility Soluble in water

Vapor Pressure 25 MM Hg @ 70°C