



APPLICATION INSTRUCTIONS

HYDRO-ETCH™ 1000

PRECAUTIONS

Avoid contact with skin, eyes and clothing. Wash hands after use and do not take internally. Please refer to the product Safety Data Sheet (SDS) before using. The preparation process should be followed to ensure adequate penetration and optimum performance:

CAUTION: Wear protective clothing, rubber gloves and plastic safety goggles while using. Contact with eyes can cause irreversible damage and permanent blindness. Contact with skin (even for a few moments) can cause severe burns. Ingestion may be fatal.

DANGER: POISON! Keep out of reach of children and pets. May be fatal if swallowed. Causes severe burns and vapor is harmful.

APPLICATION

Caution! Always add Hydro-Etch 1000 to water, not water to Hydro-Etch 1000. If you pour water into Hydro-Etch 1000 it can cause an explosive reaction that can spray you with the mixture and burn your skin! Mix solution slowly in an open-top plastic container. Do not splash. Stir gently with plastic or bare wood. Ratio varies by desired use: use a higher ratio for cleaning or a lower ratio for etching. Sample first by using one (1) part concentrate and nine (9) parts water, gradually adding concentrate and testing on a small area until desired effect is achieved. Suggested dilution ratio for etching concrete is one (1) part Hydro-Etch 1000 to five (5) parts water.

Before cleaning or etching, make sure the concrete is free of all oil, contaminants, grease, and dirt. Contrary to what many people think, acid will not clean grease and oil spots. In fact, if these areas have not been cleaned and degreased properly, the acid solution will just sit on top and not react with the concrete.

Apply the acid solution:

A plastic watering container works well to sprinkle Hydro-Etch 1000 on the concrete. This will spread the solution evenly without much splashing. Do not just pour it on the concrete. This will create an inconsistent spread of the acid solution and will not provide for a uniform result.

Scrub the acid solution:

Once the solution is applied, lightly scrub it into the concrete with a push broom or long handled scrub brush. This helps to create a uniform etch of the concrete. Let the solution sit from 2 – 15 minutes while it continues to fizz and bubble. Flush thoroughly with clean water immediately after cleaning or etching is complete. If applying a sealer, neutralize completely after use and rinse twice.

Neutralize:

Mix 4 cups of baking soda to 1 gallon of water in a large 5 gallon bucket and pour it into the now empty watering container. Or use 4 ounces of household ammonia to 1 gallon of water. Sprinkle the neutralizing solution over the part of the floor that was etched and let it sit for a minimum of 10 minutes. When time is up, rinse the neutralized solution with your hose into a drain or out the garage (if local water codes allow it). Another method is to use a wet vac and then dispose of the solution according to your local codes. Check the surface of the concrete at this time. It should feel similar to medium grit sand paper with a uniform texture. If not, you will need to repeat the process again.



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Final rinse:

Once the initial neutralizing solution is cleaned up, it is important to thoroughly flush and rinse the remaining solution out of the concrete multiple times. It can leave a white powdery residue on your floor once dried (called calcium carbonate) if you do not do this. This is a fine dust that will not allow your coating to adhere properly. Use a high pressure nozzle while thoroughly scrubbing the concrete with your scrub brush. Make sure it is thoroughly rinsed. Using a pressure washer at this point works well also. Do not use a pressure washer to rinse off the initial neutralizing solution however. It can drive any acid solution that had not been neutralized yet deeper into the concrete and cause problems later.

pH test your rinse water:

After your final rinse, dab a pH test strip onto the still wet floor to check the pH. Anything between 6.0 and 9.0 will work for most coatings with 7.0 (neutral) being ideal. If it's below 6.0 then the water is indicating that acid residue is still in the pores of the concrete. Rinse some more and repeat the test until you get the results you want.

Further Tips for Etching Concrete

It's a good idea to cover anything that you don't want to get splashed with a plastic drop cloth. Don't acid etch the concrete if the temps are below 50 degrees as the acid will not be as effective with the cooler temperatures. Also, make sure your floor has dried thoroughly before applying a concrete sealer. Fans will help. Give it at least two days with warm weather and longer if it's humid or cooler. Though the surface may be dry, the pores of the concrete can still contain moisture and escape through outgassing when the temperatures rise during the day. This will cause your coating to not properly adhere. You can always do a quick moisture test with plastic if you are not sure.