



PRESENTS THE SCIENCE OF CLEANING SAFELY WITH NANOTECHNOLOGY ENHANCED, ECO-FRIENDLY SYNTHETIC CLEANING PRODUCT

Surfaces cleaned and sealed with EcoSeal products save 30% to 50% on time and cleaning products

The EcoSeal difference: we use nanotechnology in our eco-friendly cleaners to improve the surface-active ingredients (Surfactants) at the sub-micron level with safer natural minerals, and eliminate harsher, dangerous traditional caustic chemicals. Nano surfactants drive cleaning agents deeper in soil for a more complete deep cleaning. This helps eliminate VOCs, residue build-up and improves safety profiles.

Once a surface is properly cleaned, then sealed with EcoSeal Finest, Fortify, Wonder Walk or one of our other specialty sealers, cleaning usually requires only a wiping with water and a microfiber cloth, helping to eliminate chemical exposure, save routine cleaning time and improve the environment.

I SOIL

Soil is nothing more than matter in the right or wrong place. Grease in a frying pan is good; grease on a backsplash is bad. Dirt in your garden is good; dirt on your home's carpet is very bad.

There are various types of soil:

1. Inorganic soil: Matter that was never "alive", and thus contains no carbon.

- a. Scale and lime deposits, such as water spots.
b. Rust, corrosion, and oxidation.
c. Minerals and rock formation.

Use EcoSeal Calci-cure

2. Organic soils: Matter that once "lived" and that does contain carbon.

- a. Body oils and animal fat.
b. Carbohydrates and proteins.
c. Mold and yeast.
d. Bacteria and animal waste.

Use EcoSeal Citra-solve or Extreme Strip

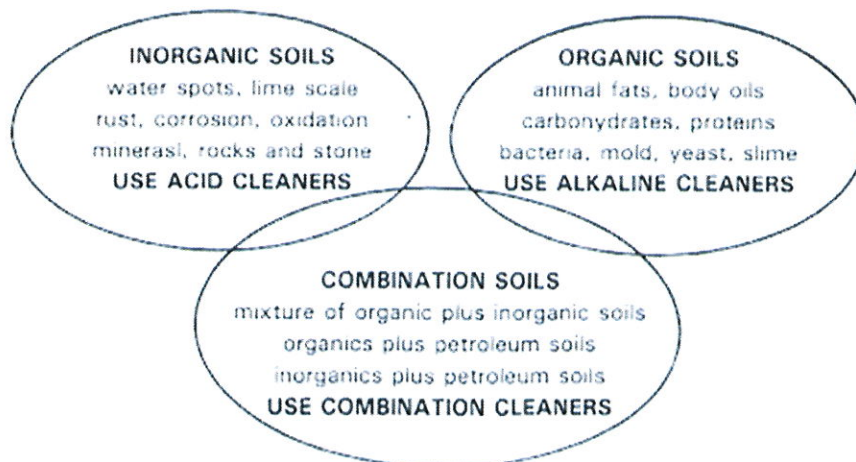
3. Petrochemical soils: Motor oils, axle greases, wax, gums and other products made from petroleum. These soils contain no water - in fact they repel water - and thus do not have a pH. They often require another petroleum-based solvent to remove them.

Use EcoSeal Safe-solv

4. Odors: chemical or biological reactions within soils often create offensive odors. Odors such as food residue or urine in tile grout may require enzyme cleaners to address.

Use EcoSeal Bio-dissolve

5. Combination soils: These are soils that contain an inorganic plus an organic soil and/or a petroleum substance. These soils are difficult to remove because they are hard to identify. Once identified, they usually require a combination type cleaner - alkalines and solvents or acids and solvents.



THE LAW OF MASS CLEANING ACTION

The type of soil usually dictates the type of cleaner that we will use to remove it.

Inorganic soil is cleaned with **acid cleaners**, or more safely with..... **EcoSeal Calci-cure**

Organic soil is cleaned with **alkaline cleaners**, or more safely with..... **EcoSeal Citra-solve**

Petroleum soil is cleaned with **petroleum-based solvents**, or more safely with..... **EcoSeal Safe-solv**

Combination soil is cleaned with **combinations of cleaners**..... **EcoSeal Citra-solve or Bio-dissolve**

ALWAYS neutralize high or low pH cleaners with **EcoSeal Neutral 7** after cleaning.

ALWAYS test cleaners on small, inconspicuous area first.

ALWAYS pre-wet the surface to be cleaned to break surface tension to make the work of easier, faster and more efficient.

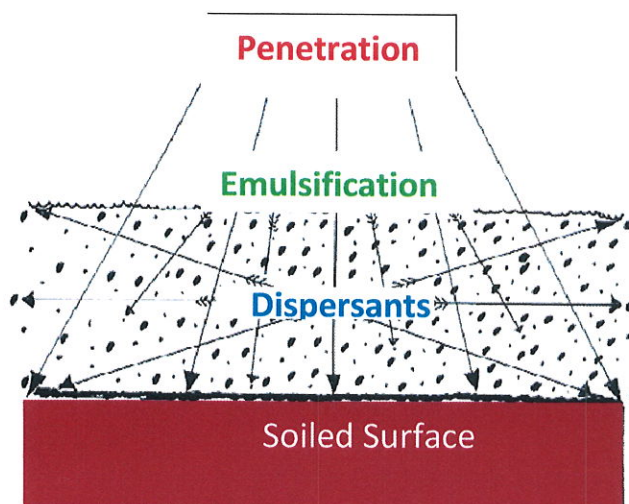
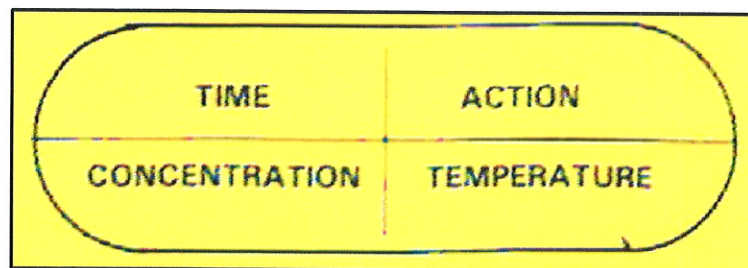
ALWAYS dilute concentrated cleaners as much as possible to still get the job done.

ALWAYS clean vertical surfaces from the top down and keep the whole surface below your work wet to avoid streaking as the cleaner runs down the uncleaned surface below. Clean floors and horizontal surfaces to allow finishing without tracking across cleaned areas. Once an area is cleaned, the cleaning agent shall be neutralized with **EcoSeal Neutral 7** prior to any protective finish regimen of **EcoSeal Finest**, **EcoSeal Fortify**, and **EcoSeal Wonder Walk**, or any other specialty Nano-finish. **Leaving a cleaned surface un-neutralized and un-rinsed may result in a chemical staining, corrosion or fouling under the finish.**

We have to take the surface into account. For instance, water-based cleaners can damage delicate wood surfaces, so a petroleum based cleaner - containing no water - is appropriate.

We also have to pay attention to the **aggressiveness** of a cleaner. A marble surface would be attacked by a strong (aggressive) acid cleaner. If we need to use an acid cleaner to remove inorganic soil from marble, we must use a very mild (non-aggressive) low pH cleaner. Use **EcoSeal Calci-cure**

The law of mass cleaning action expresses a relationship between time, action, concentration, and temperature in the process of removing soils. This laws states that if you decrease any one of these factors, we must increase one or more of the remaining factors in order to maintain equal cleaning ability.



II THE pH SCALE (water-based cleaners for organic soils)

pH is the measurement of the concentration of "hydrogen ions" (shown in chemical notation as H⁺) in relation to the concentration of "hydroxyl ions" (shown in chemical notation as OH⁻). An excess of H⁺ (hydrogen) ions over OH⁻ (hydroxyl) ions makes a solution an *acid (low pH)*. Conversely, an excess of OH⁻ (hydroxyl) ions will make the solution *alkaline (high pH, often referred to as basic)*.

All solutions that are made up of water can be measured for their pH. The pH scale runs numerically from 1 to 14. On this scale, a solution that has a pH from 0 to 6.9 is considered to be an acid. It is acidic because it contains a larger amount of hydrogen ions.

EcoSeal Calci-cure is a Nano-synthetic with a low (2.5+/-)pH.

A solution that measures from 7.1 up to 14 on the pH scale is considered to be basic (or alkaline) in nature, because it has a larger amount of hydroxyl ions.

EcoSeal Citra-solve is a Nano-synthetic with a moderately high (10+/-)pH.

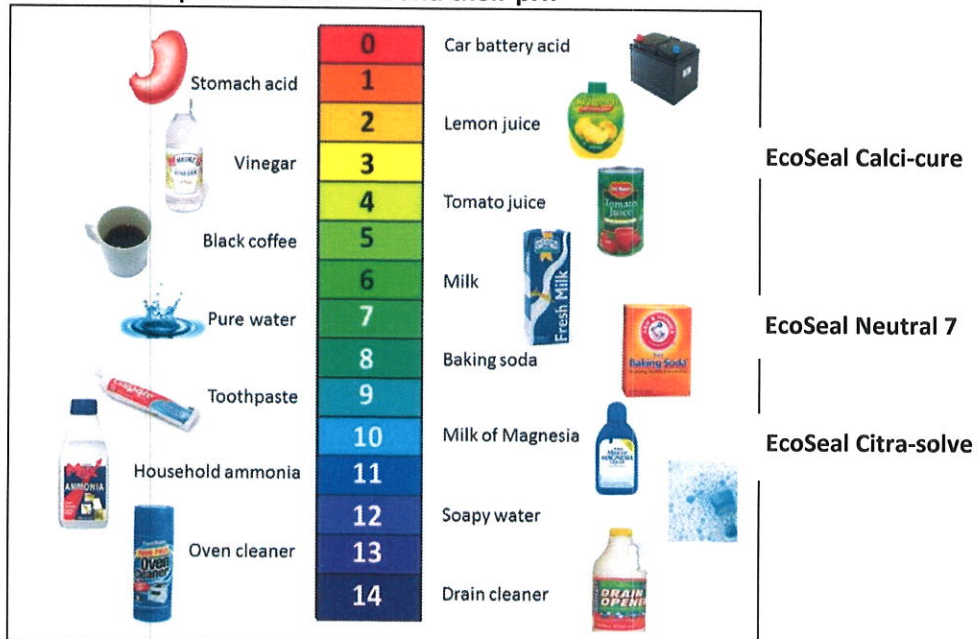
A pH of 7.0 is neutral because it contains equal amounts of hydrogen (H⁺) and hydroxyl (OH⁻) ions. Pure, unpolluted rainwater or distilled water is neutral, because it has a pH of 7.0.

EcoSeal Neutral 7 is a neutral mild cleaner for daily maintenance

Non-aqueous liquids or solutions (solvents such as gasoline, mineral spirits, and chlorinated safety solvents) have neither hydrogen or hydroxyl ions. They do not have a pH. pH is a characteristic of *water solutions* only.

EcoSeal Safe-solv is a Nano-enhanced, more eco-friendly solvent for petroleum-based soils.

Examples of some soils and their pH:



III CLEANING AGENTS

Cleaning agents contain some combination of ingredients to help them do their job: *remove unwanted soils!*

The following ingredients all have a specific job to do in a cleaner formula:

1. Solvent
2. Surfactants: detergents or soap
3. Penetrating and wetting agents
4. Chelators
5. Saponifiers
6. Builders

EcoSeal uses nanotechnology to minimize or replace harsh chemicals in these 6 ingredients.

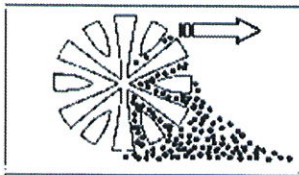
Cleaners may be formulated to do a specific job. Sometimes a cleaner will not contain many of these ingredients; other times it will contain almost all of them. Concentrated cleaners may be diluted variously to do most cleaning jobs. You do not need a separate product for toilet bowls, dishes or your car!

IV SEALERS isolate the surface from soils and damaging atmospheric pollutants. Traditional waxes and polishes are petroleum based and coat surfaces to isolate the surface. They generally are oily, tacky and attract and hold dust requiring routine light cleaning significantly more frequent. Waxes degrade quickly in sunlight.

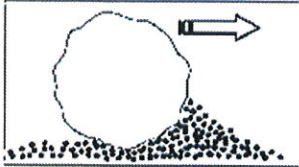
EcoSeal sealers are Nanotechnology based, eco-friendly, water-borne penetrating protectants. They integrate with any surface, hard or soft, to completely isolate surfaces from soil, UV and atmospheric pollutants. They do not attract and hold dust or soil, making follow-up cleaning faster, easier and less frequent.

V CLEANING TOOLS The right tools for any job make it easier.

Microfiber:



A cross section of microfiber threads show why they work better than cotton or traditional synthetics (*absorption action illustrated with the movement to the right*). Microfiber leaves no residue. Its extra-fine size and configuration allows you to simply wipe up and hold all soil; pollutants stay in the cloth to be rinsed or washed away.



Microfiber is used in more and more professional cleaning applications, for example in mops and cleaning cloths. Although microfiber mops cost a bit more than non-microfiber mops, users find them more economical because they last longer, work better and require less effort to use.

Whether you are stripping and sealing commercial floors, cleaning countertops or bath fixtures; or dusting ceiling fans, the proper microfiber pad, cloth or duster head makes your job faster and easier.

Exterior cleaning:

Cleaning and sealing exterior surfaces, such as driveways, patios or pool surrounds; or plastic furniture, stainless steel grills, aluminum railings or a variety of siding and fencing materials require different, generally more aggressive, cleaning agents and tools. The configuration and scope of such projects lend themselves to power cleaner application and pressure washing equipment for initial wetting/rinsing, washing and final rinsing. Pressure washing, like cleaning agent choice, should always start with the lowest pressure necessary to do the job and not damage the surface.

Sealing and protecting exterior surfaces accomplishes the same thing as protecting your furniture or granite countertops indoors, or protecting your cars finish.

EcoSeal masonry, stone, plastics and metals sealers are formulated with Nanotechnology enhancements to optimize protection and minimize future maintenance.