AgriCrete

Agricultural Concrete Preservation Systems

www.AgriCrete.com

water beading up on the 2-product systems PTS+

The AgriCrete 2-product Concrete Preservation System

Why apply the AgriCrete 2-product System?

Let's start with a "AgriCrete treated concrete" versus non-treated concrete;

Concrete treated with AgriCrete ……Versus……. Standard, untreated concrete

PIM+ or PIM+ Type S with a PTS+ topcoat

- Waterproof concrete……No waterproof concrete
- Up to 98% vaporproof concrete……No vapor proofing
- Minimum 1500 PSI harder……..No hardness increases
- Greatly reduces damage from acids, salts……...No resistance to acids or salts
- Traps bacteria under glass impregnated layer……No barrier to bacteria in the concrete
- Traps chlorides under glass impregnated layer, stops new barn syndrome……..No barrier to dissolved chloride salts
- Bead-up surface is much easier to clean……No easy-clean surface
- Less time/labour/materials means money saved……No change to cleaning costs
- PIM+ treatment prior to applying epoxies ensures the epoxy's bond……..No benefit

Material costs for the 2-product AgriCrete system:,

AgriCrete PIM+ or PIM+ Type S with PTS+ overlay is less than a dollar per square foot.

- The AgriCrete 2-product system will ensure these concrete or cement-based surfaces either stop deteriorating or maintain their original condition.
- AgriCrete reduces future maintenance costs for material costs and labour.
- The AgriCrete 2-product system reduces deterioration of the concrete, caused by rain, water, pressure washing acids and salts.
- AgriCrete treated concrete will resist wear from equipment and make cleaning quicker and less costly.

The "GO GREEN" Momentum Becomes a Competitive Advantage

Everyone cares more and more about the world we are going to leave to our children. To be **GREEN** has become synonymous with caring for our environment and the world we will leave to our children. To incorporate where possible, **GREEN** technology has many positive benefits, workers health, animal health, peace of mind.

Most of all it makes us feel good to know we are no longer being part of the problem, but we are being part of the solution.

The AgriCrete® Concrete Preservation System is composed of completely **GREEN**, zero VOCs, non-toxic; water based, ecologically and environmentally friendly products.

How standard concrete changes after treatment with the AgriCrete® 2-product System

Concrete is a brittle sponge. All concrete is alkali (salt) crystal based. These alkali crystals give concrete its strength. These alkali crystals are water-soluble, and as a result, standard concrete is continuously, slowly deteriorating from being flushed with rainwater, or worse, being pressure washed.

Being a brittle sponge, concrete also absorbs water saturated at times with chlorides and other contaminants. Salts while dissolved in water, will penetrate concrete and when the water evaporates, the salt crystals formed with all the excess salt are now too large for the old voids in the concrete. This causes the surface of the concrete to flake or spall off the surface.

- The benefits imparted when the AgriCrete® 2-product system is applied are provided by the silicate crystals formed by the PIM+ or PIM+ Type S in the concrete and the super-hard coating provided by the PTS+.
- These PIM+ or PIM+ Type S crystals are totally non-water-soluble, and the concrete is now to the depth the PIM products penetrated is as much as 1500 psi or more harder than with alkali salt crystals.
- This concrete will now resist deterioration from rain, pressure washing, and wear due to abrasion.
- The AgriCrete® 2-product system will not allow any liquids, oils or salts to penetrate.
- AgriCrete® PIM+ or PIM+ Type S adds 1500 psi or more to the hardness of your concrete. This greatly reduces wear due to abrasion from equipment.

Application Information

AgriCrete works best as a two-product system:

Why? Because all liquids, farmyard acids; uric, lactic, anaerobic, etc., clean up easier off a surface that doesn't even get wet! With an AgriCrete PTS+ topcoat all liquids will bead up, run off, and wipe off. Cleaning will be easier, take less time and use less cleaning chemicals.
You will save money at the same time as your concrete surfaces are lasting longer.

NOTE: Always read this shortened version instruction sheet together with the full instructions on the AgriCrete PIM+, PIM+ Type S and PTS+ Specification sheets

Step 1. AgriCrete PIM+

Preparation of the surface: The surface should be cool, i.e. Not in the hot sun if possible. To cool the surface, hose down the surface and squeegee the water off. Once the surface has dried you may apply the AgriCrete PIM+ or PIM+ Type S.

Application: Starting at the lowest point, or closest to the drains, and using a hand-pump type sprayer, several heavy soaking passes are made, until the PIM+ or PIM+ Type S stops being absorbed, and surface stays wet and shiny for at least 5 seconds. Six to 10 passes with the sprayer might be required depending on the porosity of the concrete. Then continue until the entire surface is done. Average coverage rates run from 150 to 200 square feet per gallon.
Note: You should hose and squeegee off the excess material before it dries, because the liquid glass in AgriCrete PIM+ and PIM+ Type S dries to a 200 mesh, white glass powder. 200 mesh is the same size as talcum powder. This is very hard to broom off concrete, hosing it off before it dries is much easier. Doing so will not affect the treatment of your concrete. The gels forms “in” not “on” the concrete in the first 20 seconds or so, the concrete is waterproof already.
These gels will take a minimum 72 hours to hydrate into non-water-soluble glass crystals, replacing the water-soluble alkali salts. During this period the treated surface can be walked on, rained on, licked by animals etc., with no negative effects to the surface or animals.

Once cured the concrete surface to the depth the AgriCrete PIM+ penetrated (max. 2mm) or PIM+ Type S penetrated, (up to 12 mm) will be permanently waterproof, 98% vapour proof, and approx. 1500 psi stronger.

Step 2. AgriCrete PTS+

Preparation of the surface: The surface should be dry, clean, and cool.

Application: AgriCrete PTS+ is also applied with a sprayer, however since it is a coating, you only want to thoroughly wet the surface. Coverage rates are about 150 to 200 square feet per gallon.
Being a coating, PTS+ will air dry in a couple hours max, and cure in a minimum 24 hours.
Foot traffic is fine once the PTS+ has air dried, but NO vehicular traffic on this surface for a minimum 24 hours.
It must NOT rain of this surface during this 24-hour curing period either.

Maintenance: You might need to periodically reapply the PTS+. While PIM+ and PIM+ Type S are internal densifiers and permanent, PTS+ is a top coating, and abrasion does wear it off over time. You can easily check by pouring a little water on the surface; if it still beads up, you are fine, if instead the concrete gets wet, and darkens under the water, and does not bead up, clean the surface and reapply.