

## PMCO-CT

### An Innovative Silane-Terminated Binder for the Impregnation of Cementitious Floorings

Today, many modern buildings showcase concrete or flowing-screed floors without any top-layers. These floorings have a special esthetic appeal through their smooth and seamless surface, yet they stain very easily. With PMCO-CT, ART offers a new binder for both ready-to-use impregnating agents and thin coatings for cement-bound floors. It provides excellent stain protection superior to conventional impregnating agents and has a color-intensifying effect.

#### An Innovative Binder Based on a Patented Technology

PMCO-CT is an alpha-silane-terminated polyether based on alpha-silane technology. PMCO-CT cures on contact with moisture and its chemical structure has been optimized to achieve low viscosity.

As a result, the binder penetrates deep into the pores of a cement-bound floor, filling the pores completely and forming a thin, shiny film on the surface. After the binder has cured, everyday substances containing water or oil are unable to enter the pores. The new binder therefore offers highly effective stain protection. Even substances that are left on the surface for some time can be removed without any lasting stains.

#### Product Description of PMCO-CT

Appearance	Transparent liquid
Solvents	Solvent free
VOC-Content	Low VOC (~0,5%, 6g/l) (Directive 2010/75 EU)
Flash point	>100 °C
Viscosity	75 mPas
Storage behavior	Long-term stable and non-sensitive to moisture .

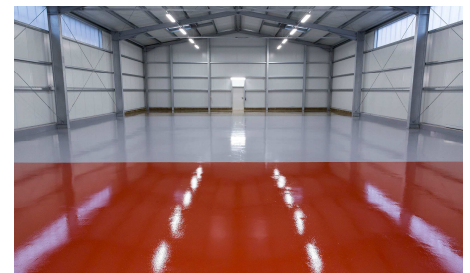
#### Application Range

PMCO-CT is ideal for cement-bound floors in industrial, commercial and private residential buildings. Examples are:

- Parking garages
- Car repair shops
- Train stations and logistics centers
- Showrooms
- Restaurants
- Event and convention centers
- Museums

#### Benefits of Impregnations Based on PMCO-CT

- 1K Formulation
- Deep penetration
- Solvent free
- Transparent
- Excellent stain resistant
- Scratch resistant
- Color enhancing
- Polishable
- Easy to apply
- Incombustible



#### Easy to Apply, Fast to Walk On

Impregnating agents based on PMCO-CT are usually applied twice. The first coat strengthens the floor. A second produces a homogeneous surface that increases scratch and scrub resistance and makes the floor polishable. It is possible to walk on or drive over the floors about twenty-four hours after treatment.



Impregnating agents based on PMCO-CT are easily applied by wiping or rolling.



## High Resistance of PMCO-CT to Fire and Heat



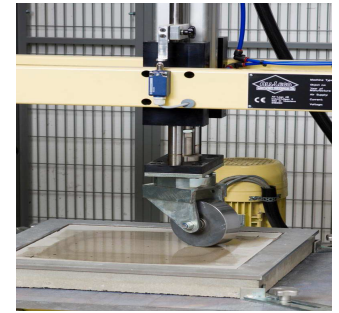
Welding



Angular Grinding



Hot boiling water



Wheel Surface Durability

### Comparing PMCO-CT with Other Impregnation Systems

There are different systems available to increase the stain resistance of mineral surfaces. Compared with these systems, **PMCO-CT** shows better stain resistance.

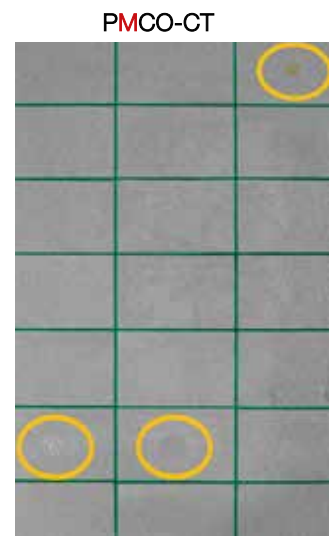
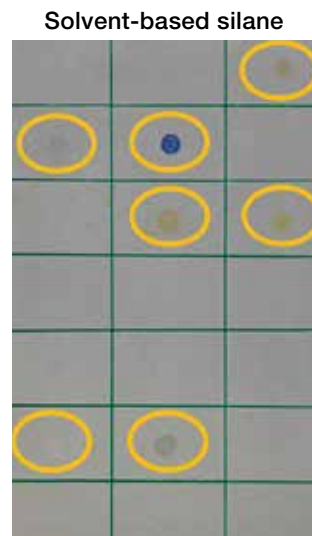
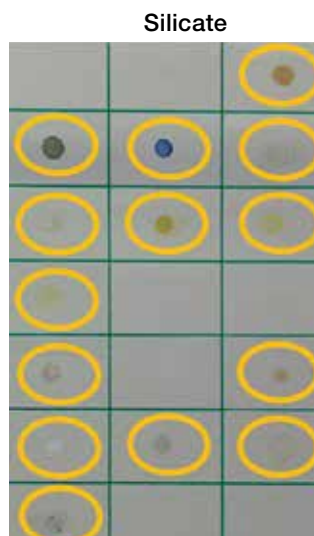
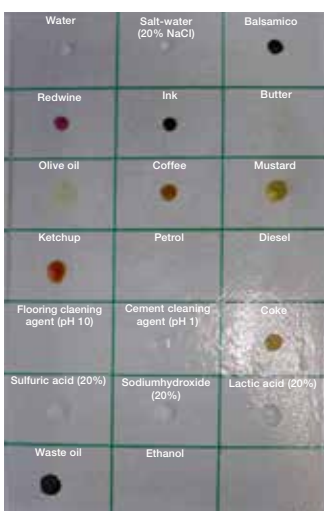
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#### Comparison of Typical Impregnation Systems

Silicates	Silane Based	PMCO-CT
Well known	Well known	New
Water based	Solvent based	Free of solvents
	Low flash point	High flash point
Alkaline	Neutral	Neutral
		Dilutable
Very limited stain resistance	Limited stain resistance	Excellent anti-staining properties

#### Stain Resistance Test Comparing Different Impregnations



#### Test procedure:

- 1: Impregnation of three concrete slabs with silicate, solvent-based silane and a **PMCO-CT** formulation.
- 2: Conditioning/storage for 1 week.
- 3: Treatment with test ingredients/chemicals for 24 hours

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