



Photo Catalytic Oxidation (PCO) Sealant (Stk No 7004-1) Product Specification

Product Description:

A durable Photocatalytic Oxidation (PCO) Sealant custom manufactured to combine Ionic Silver (Ag^+), Titanium Dioxide (TiO_2) and Silicon Dioxide (SiO_2) into a unique, non-corrosive PCO sealant imparting high photoreactivity, broad-spectrum antibiosis and chemical stability to the surface of a wide variety of substrates. It is non-leaching, non-migrating and is not consumed by microorganisms.

Product Properties:

The Product performs a catalyst function after absorbing the energy of light. Photocatalyst refers to the chemical reaction that occurs when light strikes a chemical compound that is light sensitive, such as titanium oxide (TiO_2). When TiO_2 is exposed to light, a chemical reaction will be repeated in the immediate region and cause the breakdown of organic toxins, odours, and more. TiO_2 in nano-sized particles is a potent photocatalyst that can break down almost any organic compound when exposed to light irradiation.

Physicochemical Data Sheet	
Ingredients	TiO_2 Ag^+ SiO_2 Water
Active Material	750 – 18000 ppm
Appearance	Golden, transparent
Dispersive Type	Aqueous solution
Effective Light Spectrum	Up to 475 nm
pH	7 – 9
Primary Particle Size	<8nm
Crystal Structure TiO_2	Anatase



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Agglomeration Index	2 -4
Odour	Faint soap smell
Viscosity, Dynamic	1.002 – 1.01 mPa.s
Specific Gravity	1.00 – 1.09
Volatility	None
Flash Point	Non-flammable
Coverage	100m ² / Litre (If applied by electrostatic sprayer)
Durability	Up to one year
Drying Time	<60 seconds (If applied by electrostatic sprayer) 30 minutes
Transportation	Approved for air, sea, highway and rail transport
Storage	12 Months in original container under 4-45° C, dark conditions
Container Size	2.0L Plastic pouch

Product Performance:

Product conforms to Performance Criteria of Testing Protocol - ATS/PMIC/05/14/ps

Product Uses:

Durable photocatalytic oxidation coating can be used to impart high photoreactivity, broad-spectrum antibiosis and chemical stability to substrates for the following applications.

Air filters for furnaces, air conditioners, air purification devices, automobiles, re-circulation air handling systems.

Air filters / materials. Aquarium filter material

Bed sheets, blankets and bed spreads

Buffer pads (abrasive & polishing)



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Carpet and draperies. Fibre fill for upholstery, sleeping bags, apparels etc.
where the fibre is cotton, natural down, nylon, polyester, rayon or wool.

Operating Theatres

Daycare

Elderly Care

Food Courts

Airplane Cabins

Transportation

Food Service

Schools

Healthcare

Application Method:

Recommended to be applied by Energized Electrostatic Application

Handling Precautions:

Keep container closed when not in use. Protect containers against physical damage.
The Material Safety Data Sheet is available with the marketing department and on
Microbecide.Com site.

Storage Requirement:

Store in a cool, dry, ventilated area away from sources of heat. Keep from freezing,
keep out of direct sunlight. Inspect periodically for damage or leaks. The Material
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This product specification describes the composition and properties of our product to
the best of our knowledge. It replaces all previous versions and is valid without
signature. Due to raw material variations deviations from this specification may occur
within good manufacturing practise in order to standardize our product. The
permissibility of our product may be limited to certain applications. It's the duty of the
user to insure that the use of our product complies with local applicable legal
requirements.