



TECHNICAL DATA SHEET

# PSS 20<sup>®</sup> ECO GRAFFITI PROTECTION SYSTEM

## 1. PRODUCT DESCRIPTION

PSS 20 is a breathable, completely reversible, and indiscernible system for protection against graffiti, tape and adhesive, gum, heel marks and airborne soiling for masonry, concrete and stone and mineral painted surfaces. Use on interior or exterior facades, walls, planters, etc.

PSS 20 is made of vegetable polysaccharides and water with a high viscosity and is completely biodegradable and safe to use. PSS 20 is a natural sustainable product that is harmless to man, animal life and the environment. PSS 20 is sprayed on to the wall in at least one or more coats with an Airless sprayer, where on drying it forms a gossamer-thin protective film, normally invisible to the eye and creates a fully breathable type of coating. PSS 20 should be applied by professionals and skilled tradesmen.

## 2. FIELD OF APPLICATION

PSS 20 can be applied to all washable substrates. In the case of water-repellent substrates (e.g., those treated with hydrophobic agents), the surface tension must first be reduced with a pre-treatment or primer. PSS 20 should only be used on vertical surfaces. PSS 20 is especially suitable for all kinds of natural and artificial stone facades, clinker, concrete, brick, mineral coatings, metal, and aluminum facades and is ideal for protecting public art.

## 3. PRODUCT PROPERTIES

PSS 20 is a “sacrificial” finish that does not seal the surface. It has no VOC or harmful ingredients. PSS 20 protective film is much more effective than permanent graffiti sealers by forming an invisible layer that naturally "breathes", allowing moisture vapor to escape without compromising the graffiti protection. In historic and preservation applications, PSS 20 can be easily reversed as it does not form a permanent bond with the surface. Soiled or tagged PSS 20 is easily removed from the surface with hot water, carrying with it all the dirt, spray paint, algae, dust, oil stains, etc. A replacement layer of PSS 20 is then reapplied to the surface, to continue to provide a protective barrier.

- Non-yellowing

- Completely reversible—does not permanently bond to surface
- Almost indiscernible upon application—does not dramatically alter the appearance of the surface
- Ideal for protecting delicate and historic surfaces
- Does not alter vapor permeability of surface
- Protects murals and public art
- Very U.V. and weather resistant
- > 95% biodegradable
- No VOC’s or solvents, made from plant materials
- Chemically nonreactive
- Easy removal of soiled finish with warm water washing
- No toxic gases produced on decomposition by heat

### Technical data

Specific Weight	approx. 1.1 g/cm <sup>3</sup>
pH Value @ 20°C	approx. 6.5 (neutral)
Boiling point	100° C
Dry Film Thickness	1—1.5 mils per coat (minimum 2 coats required)
Water vapor permeability: according to DIN 52615:	Sd-value 0.012 m
Water Vapor Permeability ASTM E 96	80 perms
Carbonization: (LPM Construction materials lab Test No. A-13’041-1 of 18.03.93)	Good retardant effect
Viscosity	6000-7200 cpa
Flashpoint	Non-Flammable
VOC	0 g/liter
All test results performed on 2 coats PSS20 applied at 200--250 SF/GAL and 14-day cure @ 77°F & 50% RH	

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## Color and Appearance

Clear, slightly cloudy gel—dries clear

## Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES

## 4. SURFACE PREPARATION

The substrate must be sound, clean, and free of oil, dust, grease, and silicone. For absorbent substrates: Thoroughly pre-wet substrate with clean water and allow excess water to run off. Surface should be saturated but not show signs of surface water (puddles or pools).

### For non-absorbent substrates:

Substrate must be clean and dry at the time of application.

## 5. APPLICATION

PSS 20 is applied to the surface in two or three coats using airless spray equipment at a pressure of 1450 - 2900 psi. When spraying, both vertical and horizontal overlapping pattern should be used, which together will correspond to a normal coat of PSS 20. Do not apply in hot conditions. Application in temperatures above 90°F may lead to rapid evaporation of the water in the finish leading to adhesion problems.

Note: PSS 20 is very slippery in its liquid state.

### Drying times

Drying times are temperature, humidity, and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	24 hours

### Coverage\*

SUBSTRATE	COVERAGE*
Masonry or Brick	100—200 SF/GAL
Natural Stone Masonry	100—250 SF/GAL
Cast or Pre-Cast Concrete	150—250 SF/GAL
Portland Stucco	75—125 SF/GAL
Mineral Paint Finish or Mural	150—250 SF/GAL

Metal Surfaces	200—250 SF/GAL
*Stated values are based on our experience on smooth surfaces and are for one coat. Multiple coats will require more material. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application under production conditions will forecast consumption accurately.	

### Cleaning

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment.

## 6. GRAFFITI REMOVAL

Graffiti on the PSS 20 protective film can be easily removed with hot water, without the need for chemicals. Remove soiled PSS 20 with a hot water pressure washer fitted with an adjustable fan nozzle. Saturate the surface to soften the outer layer of PSS 20. The water temperature should be between 60-70° C. Use the least amount of pressure possible, to avoid damaging the surface. On soft surfaces, a pressure of less than 250 psi is recommended. When the PSS 20 protective film is saturated, it will swell and begin to “slough” off. Peel off together with the graffiti. As the graffiti is no longer bonded, it can be easily collected and disposed of in the solid state. The graffiti does not come into contact with the actual surface and there is no “ghosting” or etching of the surface. Once the surface is cleaned and dried, a replacement coat of PSS 20 should be reinstalled immediately.

Further details on application and graffiti removal are available from Keim.

## 7. PACKAGING

25-liter plastic jerry can

## 8. STORAGE

Approximately 2 years in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

## 9. DISPOSAL

Dispose of completely emptied containers in accordance with local, state, and federal waste regulations.

### HAZARDOUS SUBSTANCE CLASS

n/a

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### 10. LIMITATIONS AND CAUTIONS

PSS 20 should not be used on floors or other horizontal surfaces. Do not apply below 38°F or above 90°F. When removing PSS 20 be careful as it is slippery once removed with hot water.

### 11. SAFETY INSTRUCTIONS

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to aid in the selection of our products and do not establish a contractual relationship. They do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

The information and recommendations set forth in this Technical Data

Sheet are based upon tests conducted by or on behalf of KEIM Mineral Coatings. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult <http://www.keim-usa.com/Technical-Data-Sheets> for the latest in product technical information.