

Concrete Guard Pro

Advanced Nano-Polymeric Protective Coating for Concrete & Masonry

FlameOFF Concrete Guard Pro is non-permeable and protects concrete & masonry surfaces from water, chloride ion penetration, food & beverage acids, bird & animal waste, salt spray, and chemicals. It is peel and flake resistant, available in gloss or satin finish, and can be applied as a top coat. Perfect solution for corrosion prevention, moisture intrusion, efflorescence, mild acids, bird & animal waste, and hydrocarbon protection.

APPLICATIONS / SURFACES

PRIMARY APPLICATIONS

Exterior concrete walls & structures, floors, masonry pavers, bricks, and cement blocks

COMMON USES

Parking structures, industrial facilities, commercial buildings, residential concrete

CHARACTERISTICS

Appearance	Light Yellow	Flash Point	16.7°C (62.1°F)	Coverage	200-600 sq.ft./gal
Finish	Clear (Gloss/Satin)	VOC	<100 g/liter	Expected Wear	5+ years
Odor	Mild Fruity	Weight	1 kg/liter	Base Type	Solvent

Coverage varies depending on porosity and texture of substrate. Reapply as needed based on wear and exposure.

SURFACE PREPARATION

Test Area: Due to the diverse nature of concrete and masonry surfaces, always test in a discreet location to ensure proper adhesion and desired appearance.

To ensure a successful application, the surface must be clean, dry, and structurally sound. Remove all traces of **oil, grease, dust, dirt, and foreign materials** that could hinder bonding. Repair any cracks, crumbling, or defects before coating.

NEW CONCRETE OR MASONRY

- Remove contaminants, **laitance**, existing coatings, and curing agents
- Create uniform profile equivalent to **600-grit** via sandblasting or floor grinding
- Verify surface **pH is 7-9**; clean thoroughly and allow to dry completely
- Confirm surface moisture is $\leq 13\%$ prior to application

PREVIOUSLY PAINTED SURFACES

- Eliminate foreign material and **sand to a 600-grit profile**
- If existing paint is chipped or weather-damaged, repaint as required
- Follow paint manufacturer's cure time **before** applying FlameOFF
- Ensure surface is clean, dry, and free of loose material

APPLICATION METHODS

Environmental Requirements: Temperature 45°F - 105°F (7-41°C) | No rain for 5+ hours after application | Adequate ventilation | Remove ignition sources

PUMP SPRAYER METHOD

- Shake container thoroughly to re-suspend particles
- Re-shake every 15-20 minutes during application
- Use high-quality acetone/alcohol proof pump sprayer with grey or red fan tip
- Hold tip 8-10" from surface; apply in cross pattern (left-right, up-down)
- Avoid puddling to prevent bubbles or delamination
- If second coat needed: wait 24 hours, abrade with 220 grit, clean dust, reapply

ROLLER METHOD

- Shake container thoroughly; re-shake every 15-20 minutes
- Use high-density ultra-smooth roller
- Apply in cross-pattern, keeping roller completely saturated
- Avoid second coat unless flaw in first application
- If second coat required: wait 24 hours, abrade with 220 grit sandpaper using buffing floor machine, clean, reapply

PROCESSING PROPERTIES

Touch Dry	2-3 hours	Walk On Time	Min 8-12 hrs	Full Cure	7 Days
Dry Through	3-5 hours	Moisture Exposure	3 days min	Recoat Interval	10-20 min

Under standard lab conditions. Light foot traffic only during walk-on period.

TECHNICAL DATA (ALL VALUES @ 77°F / 25°C)

TEST / PROPERTY	US	METRIC
Volatile Organic Compounds (ASTM D2369)	<0.83 lb/gal	<100 g/liter
Theoretical Coverage	640-800 ft ² /gal @ 0.7-0.75 mils DFT	16-20 m ² /liter @ 18-44 microns
Specific Gravity	7.36 lbs/gal	0.88 kg/liter
Shelf Life @ 77°F / 25°C	12-24 Months	
Flash Point - Pensky Martin Closed Cup	15°F	-9°C
Application Temperature	45-105°F	7-41°C
Abrasion Resistance CS-17 1000 Cycles (ASTM 4060)	23 mg Loss	
Surface Flammability (ASTM E162)	Heat Index 0 (Best Result)	
Adhesion to Concrete (ASTM D4541)	1200+ PSI Cohesive Concrete Failure	
Accelerated UV Exposure 1000 hrs (ASTM G154)	dE: <0.5	
Thermal Cycling (ASTM 6944) - 50°C/4hrs, 25°C/4hrs, -29°C/16hrs	No Effect	
Solvent Resistance - MEK (ASTM D4752)	1000 Rubs - No Effect	
Shore D Hardness (ASTM D2240)	72 ± 3	
Operating Temperature	-200°F to 350°F	

CLEAN UP

- Clean tools and equipment with **acetone**
- Flush thoroughly immediately after application
- Clean before product dries

If coating dries on tools, they will not come clean with acetone or any other solvent.

STORAGE & SHELF LIFE

- Store in cool, dry environment away from direct sunlight and heat
- Keep container tightly closed when not in use
- **Shelf Life:** 12-24 months unopened at 77°F / 25°C
- **Do not freeze.** Protect from extreme temperatures

SAFETY CAUTIONS

- Use OSHA approved 1910.134 and ANSI Z88.2 respiratory protection
- Fresh air and exhaust required in work area to prevent inhaling
- If inhaled, move to fresh air immediately; call physician if difficulties occur
- Wear butyl-rubber gloves and skin protection to avoid contact
- If coating contacts skin, wash thoroughly with soap and water
- Use chemical safety goggles or splash shields to avoid splashes
- Never wear contact lenses without eye protection
- If eye contact: immediately flush with water for 15 minutes, seek medical attention
- If swallowed: rinse mouth thoroughly, obtain immediate medical attention
- Always ensure excessive ventilation when working in enclosed areas

REGULATORY INFORMATION

DOT Classification: Class 3 Flammable Liquid

UN1263, Paint, 3, PG II

HMIS Ratings:

Health: 1 | Flammability: 3 | Reactivity: 0

CARE & MAINTENANCE

- Use damp rag for routine cleaning
- Avoid abrasive cleansers or scouring pads
- If area is damaged: sand lightly with 600 grit and reapply
- If substrate damaged: make repairs first before reapplying

FlameOFF Coatings

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Sold in 5-gallon containers. Contact technical sales for large volume inquiries.

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