

EVOCOAT HYBRID 5503-450

CHEMICAL DESCRIPTION

Evocoat Hybrid 5503-450 is fast setting, rapid curing, 100% solids, flexible, aromatic, two component hybrid polyurea spray system that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -30°C. It is relatively insensitive to moisture and temperature allowing application in most temperatures.

FEATURES

- Zero VOC (100% Solids)
- Excellent Thermal Stability
- Low Temperature Flexibility
- Good Chemical Resistance
- Coats Carbon or Mild Steel Metals without Prime
- Seamless

USE

- Airports
- Refineries
- Fertilizer Plants
- Mining Operations
- Food Processing Plants
- Marine Environments
- Secondary Containment
- Walkways and Balconies
- Water and Waste Water Treatment
- Power Plants
- Structural Steel
- Warehouse Floors
- Cold Storage Facilities
- Landfill Containment
- Paper and Pulp Mills
- Parking Garage Decks
- Industrial and Manufacturing Facilities

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TECHNICAL DATA

	Unit	Value		Method
Mix Ratio by Volume	volume	1/1		Internal
Pot Life	sec	3-10		Internal
Tack Free Time	sec	10-15		Internal
Recoat Time	hours	0-1		Internal
Viscosity (25°C)	cps	A: 750-850	B: 750-900	DIN 53018
Density	gr/cm ³	1,02	1,1	DIN 51757:2011
Tensile	MPa	25±3		ASTM D-412
Hardness	Shore D	45±5		ASTM D-2240
Hardness	Shore A	95±5		ASTM D-2240
Elongation	%	350±25		ASTM D-412
Tear	N/mm	100±15		ASTM 624 C
Adhesion Strength by pull of test with primer	N/mm ²	≥2,5		TS EN 1542
Abrasion	mg	136		ASTM D 4060

COLORS

Custom colors are available upon request. Due to its aromatic composition, Evocoat Hybrid 5503-450 will tend to yellow or darken in color and will become flat after exposure to UV light. Evocoat Hybrid 5503-450 may be top coated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

MIXING

Evocoat Hybrid 5503-450 may not be diluted under any circumstances. Thoroughly Evocoat Hybrid 5503-450 Part A (Polyol) with air driven power equipment until a homogeneous mixture and color is obtained.

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COVERAGE

Evocoat Hybrid 5503-450 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mm thickness is one kilogram per 1 sq.mt.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating.

New and Old Concrete

Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agent, curing compounds, salts, efflorescence, laticence and other foreign matter by shot blasting and/or suitable chemical regulations. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Evoprime and sand should be used as a repair agent for cracks, spalls, bug holes and voids.

Wood

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded.

Steel (Atmospheric and Immersion Exposure)

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Shoot Evocoat Hybrid 5503-450 on to any bare metal the same day as it is cleaned to minimize anpotential flash rusting.

Aluminum

Aluminum should be blasted with aluminum oxide or sand and not with steel or metal grit. Excessive blasying may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner.

Brass and Copper

Brass and copper should be blasted with sand and not with steel or metal grit. Remove all dust and grease prior to applying primer.

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Galvanized Surfaces

Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastics

The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned

Textiles, canvas, fabrics

Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steels

Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and old Cast Iron

Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

APPLICATION

Both Side-A and Side-B (isocyanate) materials should be preconditioned to 25°C before application. Evocoat Hybrid 5503-450 should be using a two component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor or other equivalent machine may be used. Both Part-A and Part-B materials should be sprayed at a minimum of 180 bar and at temperatures between 75-85°C. Adequate pressure and temperature should be maintained at all time.

DELIVERY

Evocoat Hybrid 5503-450 – (A Component-Polyol): 200 kg metal drum

Evonat C 154– (B Component- Isocyanate): 225 kg metal drum

STORAGE

Evocoat Hybrid 5503-450 has a shelf life of 6 months from date of manufacture, in factory-sealed containers. Part-A and Part-B drums are recommended to be stored above 15°C. Avoid freezing temperatures. Store drums on wooden pallets to avoid direct contact with the ground.

LIMITATIONS

Do not open until ready to use.

SAFETY ADVICE

Should be wear protect eye wear, gloves, clothes and shoes during usage.

Avoid contact with skin contact; hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical advice.

Should be comply legal regulations during transportation.

For further information is available in MSDS.