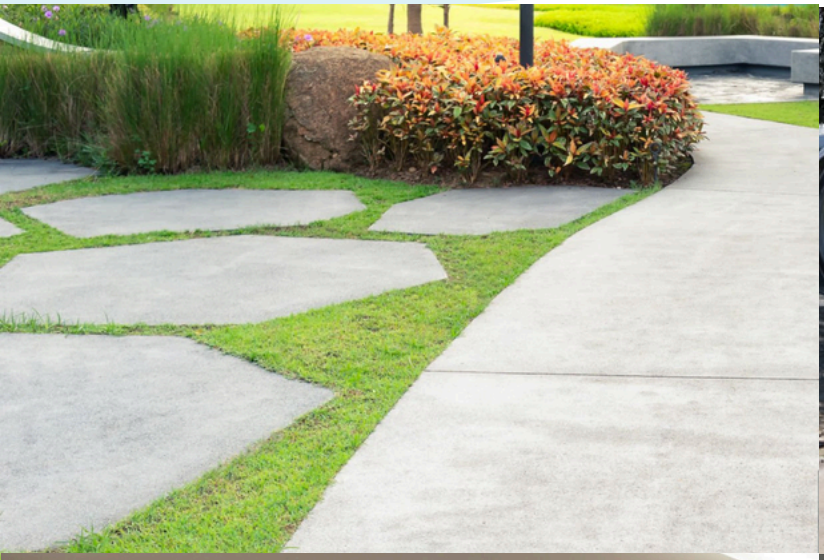
STI POLYMER
CONCRETE COATINGS



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CONCRETE COATINGS

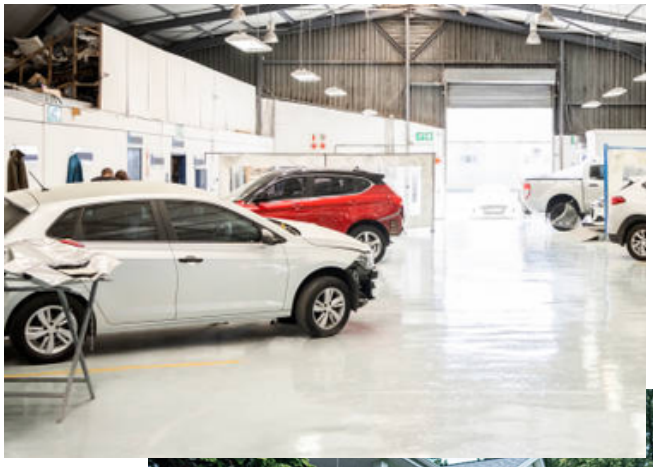
Concrete coatings are designed to protect, strengthen, and enhance concrete surfaces. Whether it's a driveway, warehouse floor, or exterior wall, these coatings shield against water, chemicals, UV damage, and abrasion. They help prevent cracking, staining, and surface deterioration while improving appearance and extending the life of the concrete.

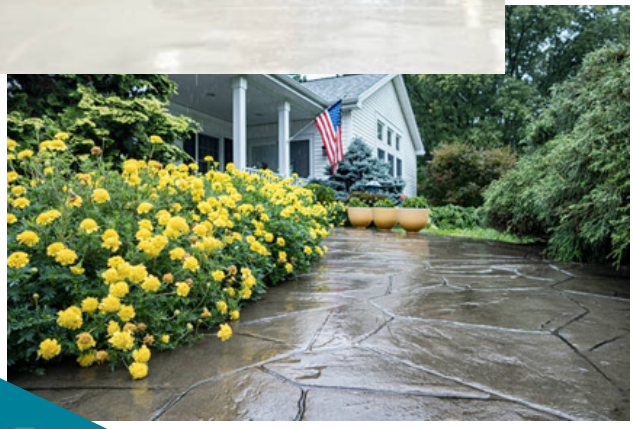
Key Features:

- ✓ Water resistance
- ✓ Abrasion durability
- ✓ Chemical protection
- ✓ Hardness

Applications:

- ✓ Pool decks
- ✓ Walkways
- ✓ Porches
- ✓ Garage floors





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CONCRETE COATINGS

STI Concrete Offerings

Typical Physical and Performance Properties

Property	Sycoat® 8655	Sycoat® 2020	Sycoat® 223	Sycoat® 299	Sycoat® UC-404	Sycoat® 520	Sycoat® 123	Sycoat® 822
Percent Solids	49	42	49	49	49	44	49	50
Polymer	Acrylic	Acrylic	Styrene Acrylic	Styrene Acrylic	Styrene Acrylic	Styrene Acrylic	Styrene Acrylic	Styrene Acrylic
Viscosity @ 25°C (cps.)	<1,500	500 - 1,500	500 - 2,000	500 - 2,000	500 - 2,000	≤300	300 - 700	200 - 1,000
pH	9.0	8.9	8.5	8.5	8.5	8.5	8.5	8.5
Tg (°C)	30	46	50	32	14	23	25	1
Density (lbs./gallon) @ 25°C	8.8	8.8	8.4	8.5	8.5	8.4	8.7	8.7
Particle Size (nm)	160	105	150	160	140	160	150	170
Dispersion Type	Anionic	Anionic	Anionic	Anionic	Anionic	Anionic	Anionic	Anionic
APEO Free	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Self-Xlinking	Yes	Yes	No	No	No	Yes	No	Yes

Concrete Tough, Weather Ready.

Advanced concrete polymers designed for penetration, water resistance, and lasting surface protection.

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Featuring Sycoat® 2020

Technical Data Sheet

Description

Core Shell Silane Modified Acrylic Emulsion

Suggested Uses

- Finished topical, high-gloss concrete coating
- No formulating needed
- Wood varnish
- Concrete sealers and stains

Characteristics

- Low VOC
- Small particle size
- Excellent water resistance
- Great penetration
- Excellent blush resistance
- Coatings made with Sycoat 2020 will demonstrate outstanding UV resistance
- Self-Crosslinking

Typical Physical Properties

Property	Value
Percent Solids	41 -43
Polymer Type	Acrylic
Brookfield Viscosity @ 25°C RVT #62 @ 12 rpm (cps.)	500 - 1,500
pH	8.6 - 9.2
Tg (°C)	46
MFFT (°C)	3
Density (lbs./gallon) @ 25°C	8.8
Particle Size (nm)	105
Gloss @ 20°	60.5
Gloss @ 60°	84.5
Dispersion Type	Anionic
Appearance (wet)	Milky White
Odor	Slight Acrylic

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Featuring Sycoat® 2020

Testing Evaluated

- Konig Hardness
- Taber Abrasion
- Chemical Resistance
- Hot Tire Pick-Up Resistance

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Featuring Sycoat® 2020

Concrete Patio Paint

Pigment grind		Pounds	Gallons
Water	Carrier	162.80	19.6
Texanol	Solvent	10.00	1.3
BYK-024	Defoamer	4.00	0.5
KTPP	Dispersant	1.00	0.1
Tamol 165A	Dispersant	9.00	1.0
Surfynol 440	Wetting agent	2.00	0.2
TiPure R706	Pigment	140.00	4.2
Minex 7	Extender	68.00	3.1
Attagel 50	Pigment	4.50	0.2
Mix 5 minutes			
Water	Carrier	19.60	2.4
DPNB	Solvent	5.00	0.7
Proxel GXL	Preservative	1.00	0.1
Polyphase 663	Mildewcide	8.00	0.8
Let Down			
Sycoat 2020	100% Acrylic	481	54.7
Texanol	Solvent	5.00	0.6
BYK-024	Defoamer	4.00	0.5
LubaPrint 164/H	Slip Agent	10.00	1.2
Water	Carrier	65.00	7.8
RM-8	Thickener	4.00	0.4
	Total	**994.90**	**99.4**

PVC	22.0%
WS	43.8%
VS	33.1%
lbs/gallon	10.0

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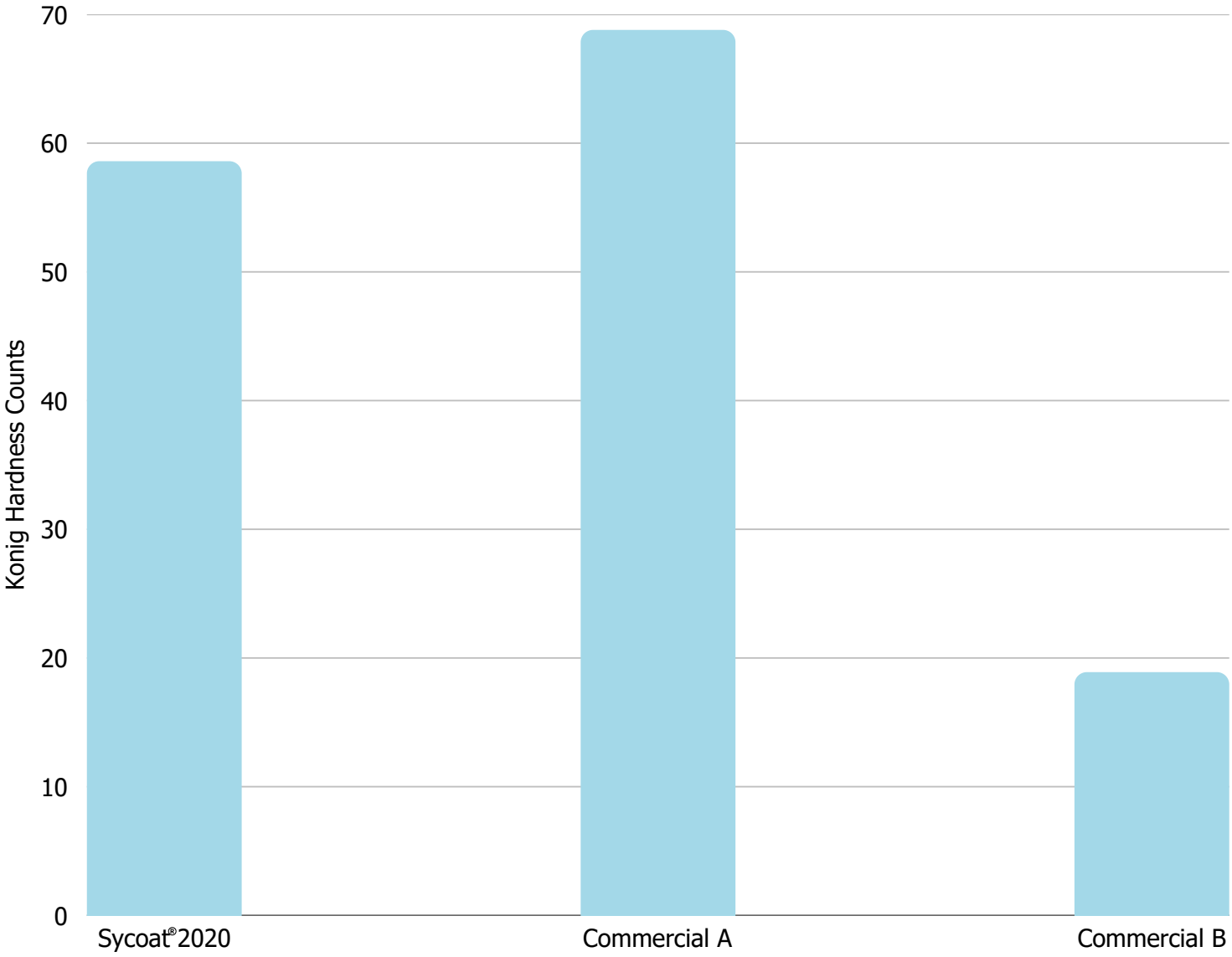
Konig Hardness Evaluation



- Paint samples were dried for 7 days prior to testing.
- Higher Konig counts indicate a harder surface.
- Results show that Sycoat® 2020 forms a hard, durable film, comparable to the leading commercial product. Its performance significantly exceeds that of Commercial B and closely rivals Commercial A.

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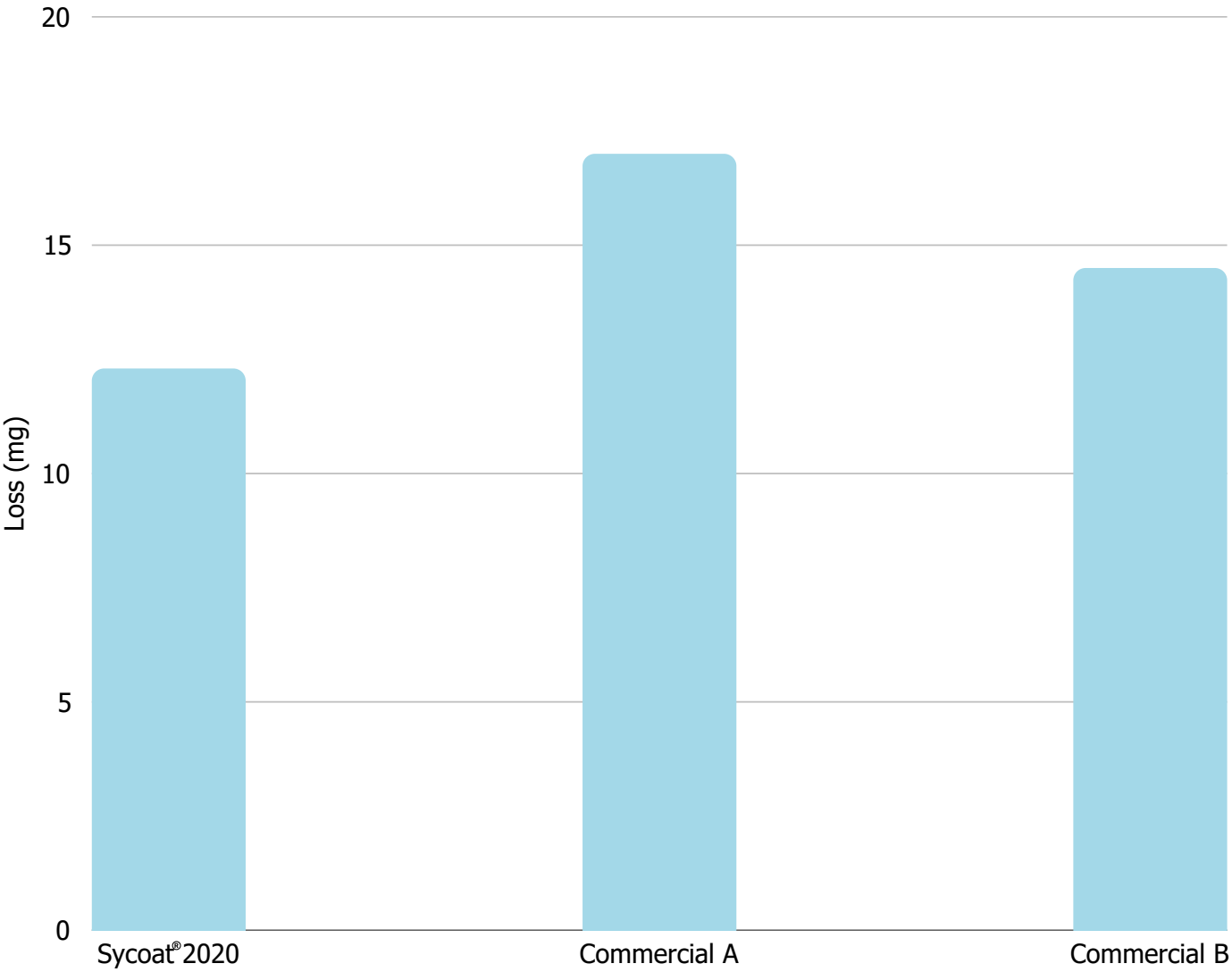
Featuring Sycoat® 2020

Taber Abrasion Evaluation



Paint samples were dried overnight before testing. A Taber with CS-17 wheels, 500g load was used and ran for 500 cycles. Sycoat® 2020 demonstrated superior abrasion resistance, with less material loss than both commercial controls.

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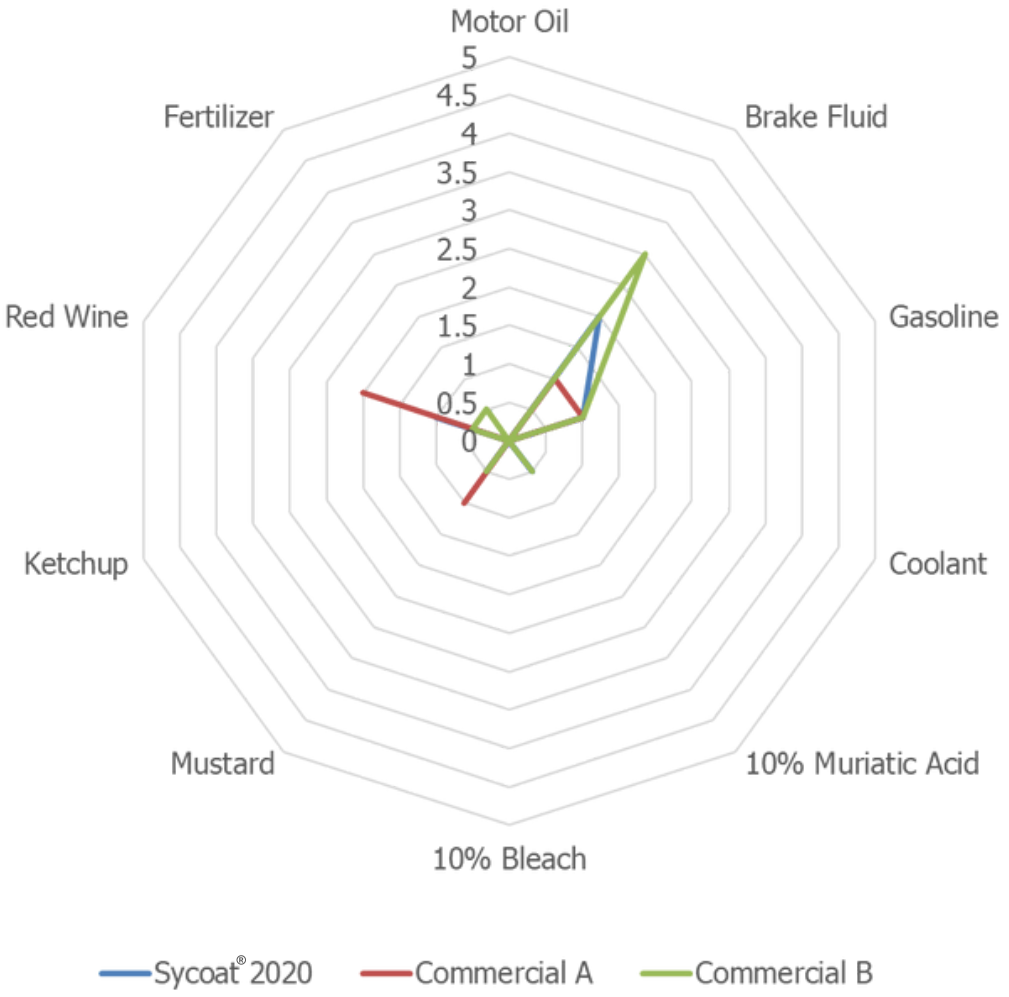
Featuring Sycoat® 2020

Chemical Resistance



Paint samples were dried overnight before chemical exposure. Chemicals remained on the surface for 24 hours before evaluation. Sycoat® 2020 showed excellent chemical resistance, outperforming both commercial controls.
(Scale: 0 = no change, 5 = total failure)

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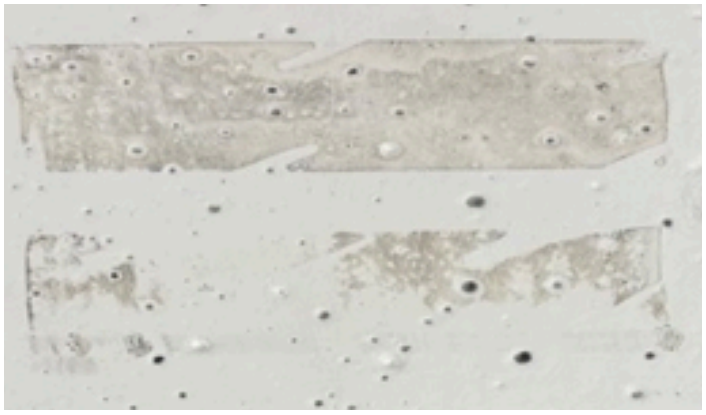
Featuring Sycoat® 2020

Hot Tire Pickup Results



Sycoat® 2020

Competitive A

Paint samples were dried overnight before testing. A heated, wet tire was placed on each coating with a pressure of 40 lb/in². Sycoat® 2020 showed superior resistance, with no visible imprint and less coating removal than the commercial control.

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CONCRETE COATINGS

Performance Summary of Sycoat® 2020

Conclusion

Sycoat® 2020 demonstrates excellent performance across key durability and protection metrics for concrete coatings:

- **Hardness**: Comparable to leading commercial products, indicating a tough, durable film.
- **Abrasion Resistance**: Lower material loss confirms enhanced surface wear resistance.
- **Chemical Resistance**: Strong protection against a wide range of harsh substances.
- **Hot Tire Pickup**: No imprint or coating removal under stress conditions.

Sycoat 2020 delivers premium protection and durability—making it an ideal choice for demanding concrete applications.

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