



Polyco
ENGINEERED TO PERFORM

**BOOST PERFORMANCE.
FORTIFY ROADS.**



SigmaBond

Achieving Top Performance from Tires.

SigmaBond enhances the performance of your asphalt mix, sustainably.

SigmaBond is an innovative asphalt that enables hot mix contractors to use more upcycled materials while extending the life of pavements. Utilizing Polycyco's proprietary Rapid Digestion Process™ (RDP), end-of-life tires are liquefied and blended with asphalt to create custom asphalt formulations. SigmaBond leverages the performance properties inherent in those tires, resulting in longer-lasting roads. With SigmaBond, we're doing our part to build a sustainable infrastructure today in order to ensure a brighter future.



SigmaBond Benefits

For the paving industry, SigmaBond translates into safety and cost savings. SigmaBond enables faster production times and sustainable practices without compromising performance. With SigmaBond, pavements are better protected and stay darker and smoother longer — improving driving conditions for all.

Safety & Cost Savings

- » Darker, smoother pavements
- » Enhance contrast of pavement markings
- » Improves life cycle cost management

Versatility

- » Engineered for standard or balanced mix designs
- » Handles and processes like standard PG asphalt
- » No specialized equipment required
- » Transportable by rail
- » Works well in emulsions
- » Application-specific viscosity

Resiliency

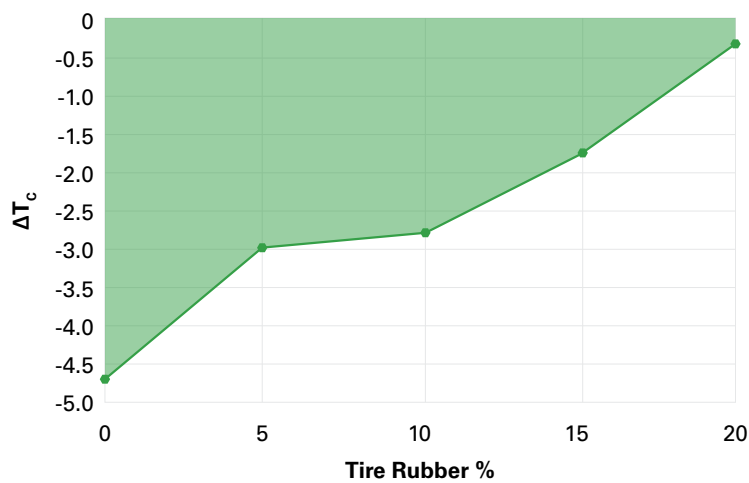
- » Superior resistance to UV oxidation and aging
- » Storage stable (does not separate or settle)
- » Resistant to thermal cracking

Sustainability

- » Longer lasting pavements
- » Tire content can exceed more than 40% of the concentrate
- » More recycled materials in HMA and WMA
- » Reduces tire waste
- » Extends volume of existing PG grades
- » Improves ΔT_c as much as 4°C

SigmaBond Performs

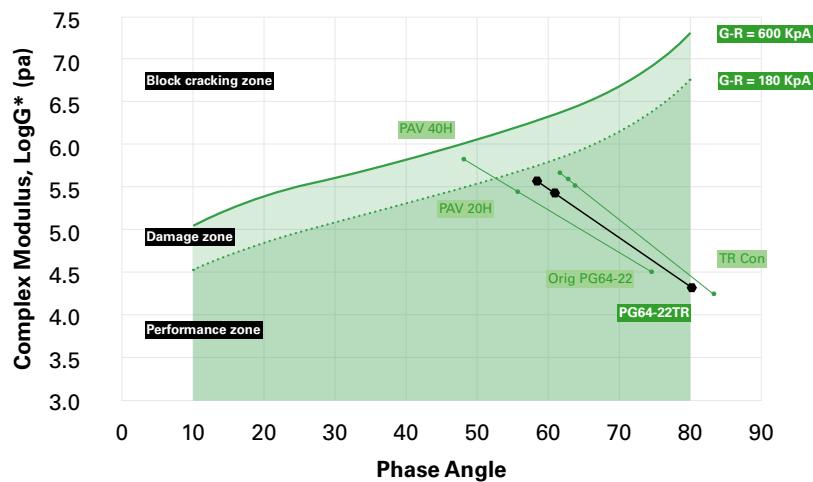
Resistant to Thermal Cracking



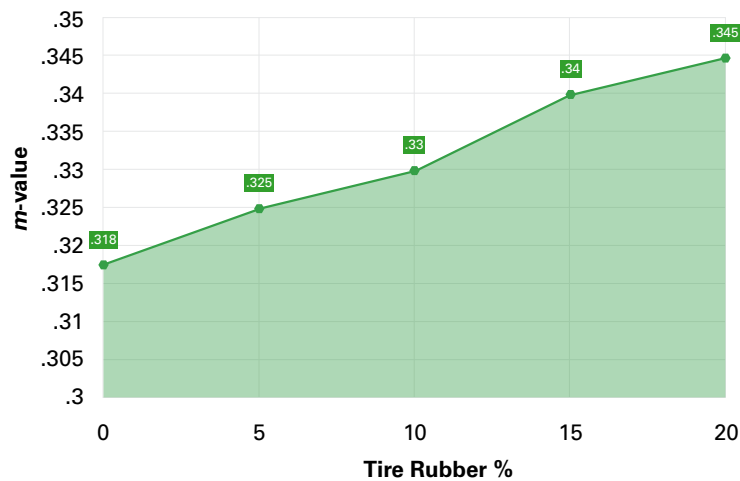
“We need to raise the bar as an industry — SigmaBond ensures that asphalt endures and performs.”

— Hotmix Producer

Block or Fatigue Cracking | Black Space Diagram



Low Temperature Improvement



**STABLE PROCESS.
CONSISTENT RESULTS.**

RAPID DIGESTION PROCESS™

SigmaBond is powered by RDP — the only process in the market that completely digests recycled tire rubber and asphalt into a homogeneous, liquefied state.



**PREDICTABLE
PERFORMANCE**



WEATHERABILITY



**RESISTANCE TO
THERMAL CRACKING**



**ELASTIC
RECOVERY**



**HIGHER PERCENTAGE
OF TIRE RUBBER IN MIX**



**STORAGE
STABLE**



**APPLICATION-SPECIFIC
VISCOSITY**



**FASTER PRODUCTION
PROCESS**

**Enhance the sustainability of your asphalt mix without
sacrificing performance.**

Contact Polyco at 972-875-9300.

uspolyco.com

