



**BOOST PERFORMANCE.  
FORTIFY ROADS.**

# Achieving Top Performance from Tires.

## Sigmabond enhances the performance of your asphalt mix, sustainably.

Sigmabond is a revolutionary asphalt that enables hot mix contractors to use more upcycled materials while extending the life of pavements. Utilizing Polycy'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

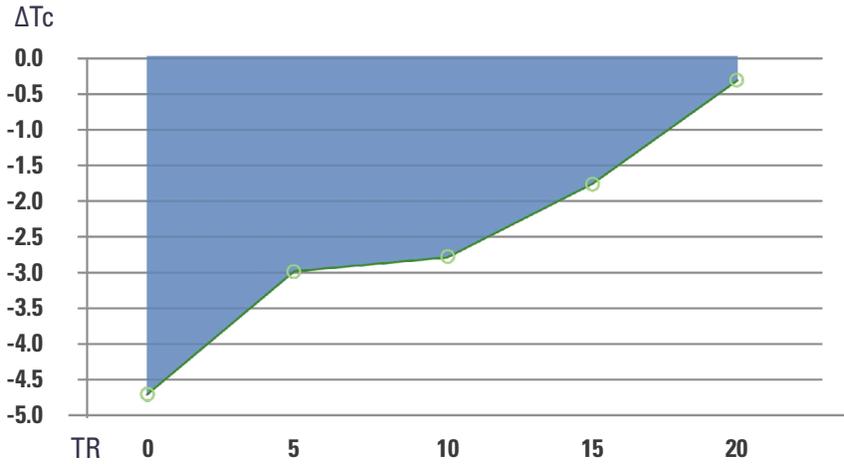
- » Superior resistance to UV oxidation and aging
- » Storage stable (does not separate or settle)
- » Resistant to thermal cracking

### 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  $\Delta T_c$  as much as 4°C

# Sigmabond Performs

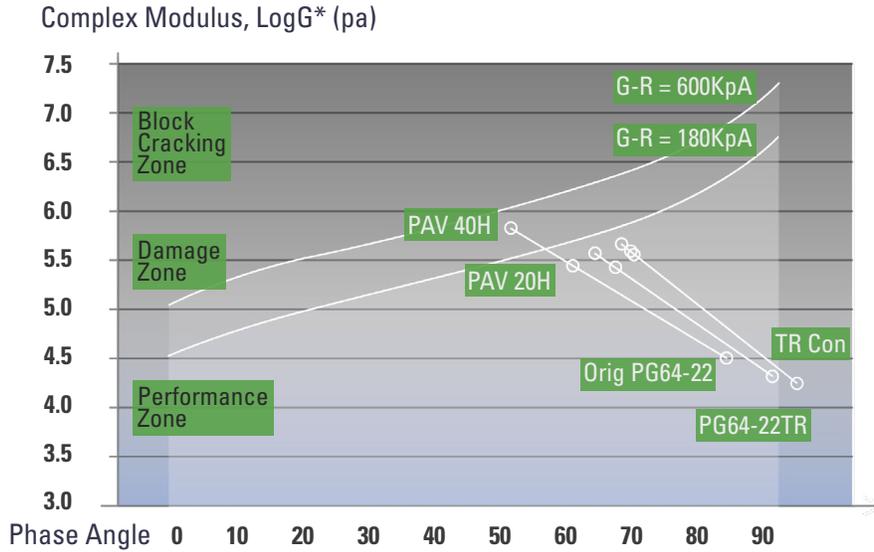
## Resistant to Thermal Cracking



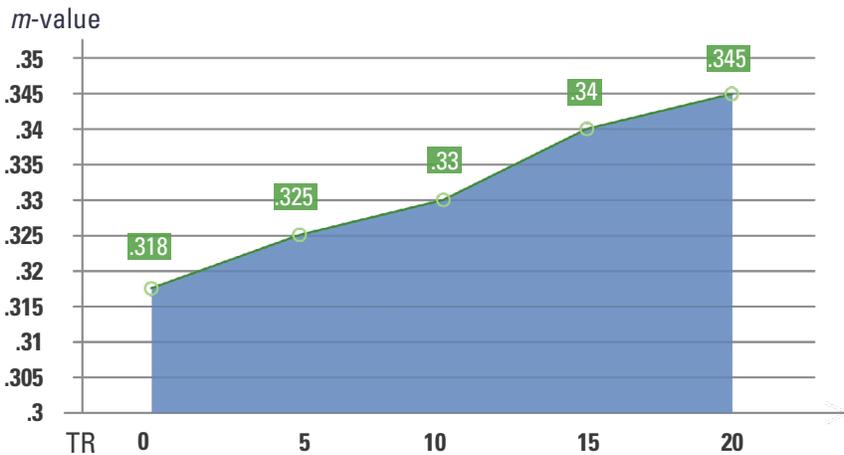
**“We need to raise the bar as an industry — Sigmabond ensures that asphalt endures and performs.”**

— 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](http://uspolyco.com)

