

# COAL TAR SEALANTS: ARE YOU AWARE OF THE HAZARDS?

Coal Tar may seem like a low-cost solution, but as the coating ages, real hazards develop.

Preventing oxidation of the binder in your asphalt pavement is a "first priority" and critical to pavement longevity. When you choose a Coal Tar sealant there are a few facts to consider:

**FACT:** Coal Tar is a coating that lays on the surface of the pavement and will wear off. Reapplication is advised every 2-4 years.

**FACT:** Sealcoat wear is visible in high traffic areas within a few months after application.

**FACT:** Coal Tar is chemically incompatible with the asphalt binder and will exhibit surface defects such as cracking, peeling, and delaminating sooner than other methods.

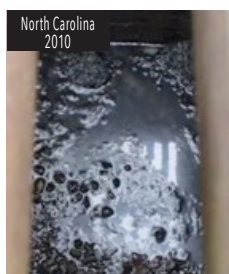
**FACT:** As Coal Tar coatings age and abrade from tires, snow plows, and normal oxidation, the particles accumulate and make their way into our homes and in our water sources.

**FACT:** Studies indicate that Coal Tar products contain 1,000 times more harmful PAHs than asphalt based sealcoat products.

**FACT:** Coal Tar pitch is cited as a Hazardous Substance by OSHA, ACGIH, DOT, NIOSH, NTP, IARC, and NFPA.

Coal Tar sealants sit on top and don't penetrate down into the matrix or improve the strength of the binder. When the coating is damaged, **the binder is exposed** and will degrade fast!

**FACT:** Studies have shown Coal Tar pitch to be highly toxic to animal, plant, and human life. In response, many municipalities have banned the use of Coal Tar products and/or created expensive remediation laws and programs to safely remove and dispose of Coal Tar's toxic substances.



Coal Tar sealant particles washed down the parking lot's sewer drain and into a local stream.



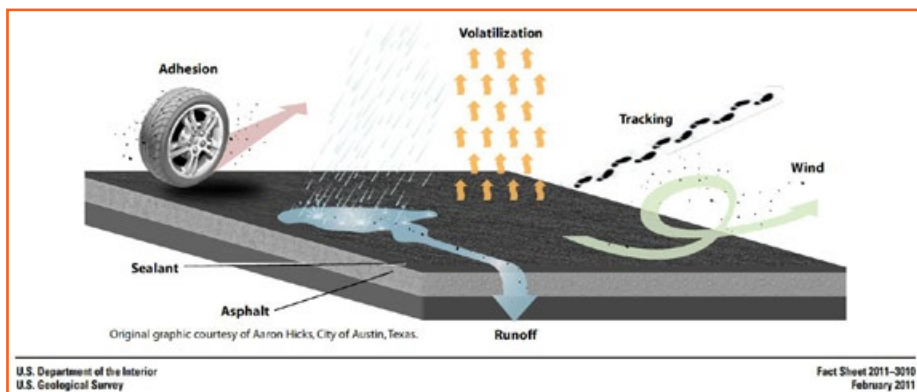
Coal Tar sludge was so thick and sticky, a sizable sample could easily be collected from the drain.



A sampling of fish species killed in a 1.5 mile stretch of stream running through residential property.



Findings showed extremely high levels of PAHs in the air many hours after Coal Tar sealant installation.



Coal Tar coatings age; abrade/peel and deposit elsewhere. Proven to be toxic, Coal Tar's hazardous substances pollute our buildings, schools, homes, and water supply.

Deposited from degrading parking lots, Coal Tar's sticky residue particles bond with organic and inorganic surfaces making removal difficult, often ruining property.



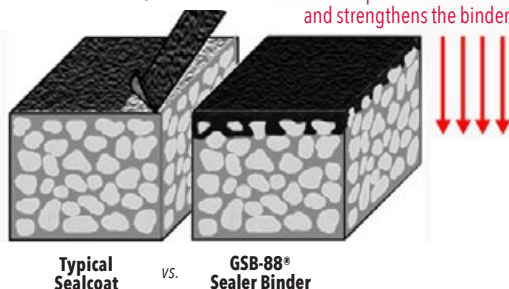


# Choose a better option for your pavement. Don't just coat it. Preserve it with **GSB-88®**.

Applications of EPA tested **GSB-88®** once every 5 yrs. can:  
Double the life of pavements **and** reduce overall maintenance costs.

- Fig. A -

Coatings including Coal Tar sit on top and peel off, leaving your pavement exposed, in worse shape than before sealing!



- Fig. B -

GSB-88® penetrates down into the pavement matrix and strengthens the binder!

Compatible with bitumen, resin can be melted into hot bitumen, added during the hot-mix manufacturing process, or blended into a preservation treatment.



GSB-88® seals cold joints, shoulder, locks down chip seals, rejuvenates oxidized and moderately raveled pavements. Best at preserving new / newer hot-mix asphalt surfaces.



GSB-88® is environmentally sound and easy to use; requires simple preparations with minimal down time. \*Frequently, treated pavements are opened a few hours after closure!

## Why Choose GSB-88®?

A recent NAVFAC study compared 10 sealants, **GSB-88®** outperformed every sealant (including polymer modified) in wet track abrasion tests, increased permeability, reduced viscosity, and reduction of oxidation processes. **AND** GSB® was found to have the lowest life-cycle cost.

## GSB-88® is a Very Different Processes:

While modern fractioning techniques are proven to have significant negative effects on binder strength and durability, GSB-88® skips the refining process entirely; leaving the strength, durability and longevity of the Gilsonite resin completely intact—making binder health both quantifiable and predictable!

GSB-88®, at the molecular level, is a naturally high density (un-broken) long-chain hydrocarbon. Naturally, GSB-88® has a high nitrogen content and enables Gilsonite resin to bond tenaciously to aggregates, halt water intrusion from above and prevent medium and heavy oils in the pavement from escaping. Unique and proven, these properties also create an extremely durable in-depth penetrating sealer and binder that is not just a "top-coat". Instead, GSB-88® is absorbed into the pavement to become part of the matrix adding rejuvenating maltene oils and asphaltenes down into the pavement surface. When pavements are treated with GSB® while in New, Good Condition, and/or still exhibit sound structural integrity. **YOU SAVE MONEY!**

## Peanut-butter vs. Butter.

Typical sealcoats lay up on the surface much like peanut-butter sits on top of bread. These coatings do not penetrate into the matrix and allow vital oils to evaporate as pavement ages and decays—therefore performance is tied directly to how much is left on top to protect the binder.

(See Fig. A and Fig. C)

## GSB-88® is Like Butter.

Like the way butter seeps down into bread, GSB-88® is absorbed into the pavement to become part of the matrix itself while retaining all vital oils and all the flexibility inside—preserving pavement performance.

(See Fig. B and Fig. D)

## - Proven Benefits of GSB-88® -

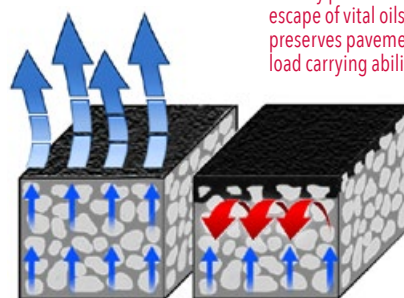
- Longer Life Cycle, Lower Cost
- Halts Surface Oxidation / Weathering
- Penetrates into the Matrix
- Minimizes Closure / Downtime\*
- Improves Safety

**Save 10x over the Cost of 1 Asphalt Overlay!**

**Gee**  
ASPHALT  
SYSTEMS,  
INC.  
Making  
Good Pavements  
Last Longer

- Fig. C -

Vital oils reach the surface and evaporate; drying up, making pavement brittle.



Typical Sealcoat vs. GSB-88® Sealer Binder

- Fig. D -

GSB®'s high molecular density prevents the escape of vital oils and preserves pavements load carrying ability!

## GEE ASPHALT SYSTEMS, INC.

- Established 1950 / Family-Owned.
- Recognized & Trusted Nation-wide.
- Advancing Preservation Strategists.
- 150+ Yrs. of Combined Experience of highly trained technicians & craftsmen.

As one of approximately 65 GSB® dealers in the U.S., Gee Asphalt is the **ONLY** GSB® applicator with 44+ Yrs. of continuous experience traveling to projects nation-wide. Call for a free consultation and cost estimate and we will help you establish your Asphalt Preservation Program today!