

# GSB-88® is Very Different From Other Competing Processes:

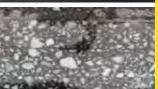
While modern fractioning techniques are proven to have significant negative effects on binder strength and durability, GSB-88® skips the refining process entirely; leaving the strength, durability and longevity of the Gilsonite resin completely intact-making binder health both quantifiable and predictable!

GSB-88®, at the molecular level, is a naturally high density (un-broken by refining) long-chain hydrocarbon. Naturally, GSB-88® has a high nitrogen content which enables the 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-88® while still in Good Condition, YOU SAVE MONEY!

Simply put, GSB-88® doubles pavement life by retaining vital oils and flexibility down inside the pavement where they belong! AND, GSB-88® saves up to 10x over the cost of 1 asphalt overlay! And that's just, <u>BETTER!</u>







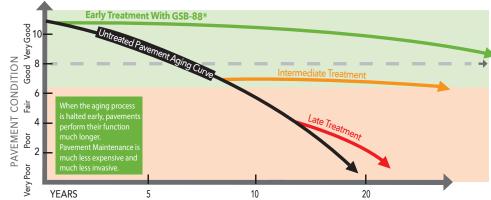
Once the surface erodes away, the binder that holds your road together is exposed to the elements. Even if you patch the damage, the structural break-down continues; water and seepage expand and contract allowing vital oils to escape to the surface and your pavement becomes brittle – and will need to be replaced sooner than you think!

#### A BETTER WAY - INVEST \$1 SAVE \$11

"To get the most bang for the buck for taxpayers, Caltrans targets dollars where they are most effective – pavement preservation. Every \$1 spent on preventive pavement maintenance saves Californians \$11 that would have been spent on expensive pavement repairs."

- Caltrans Director Malcolm Dougherty.

#### Early Pavement Preservation With GSB-88® Works Better!



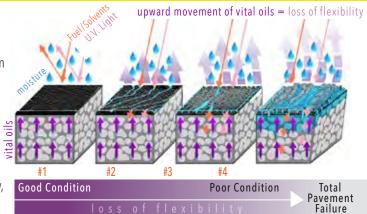
Applications of GSB-88® 1x every 5 yrs can double pavement life while reducing overall maintenance costs. As long as a pavement is structurally sound, GSB® applications will provide the maximum benefit over time. Gee Asphalt can demonstrate pavements that have been in a continuous GSB® Preservation Strategy for 44+ yrs and are predicted to perform at a high level of service longer than 50 yrs!

### A familiar scenario: Life cycle of typical sealcoat:

#1) New sealant keeps elements / seepage out before damage is noticeable, but the vital oils that keep pavements flexible in an Excellent / Good Condition begin to move upward through the matrix.

#2) & #3) Cracks and defects appear. Even barely detectable cracks are enough to allow elements / seepage to wreck havoc in the matrix while vital oils reach the surface. You are losing pavement flexibility at an alarming rate!

#4) Total sealant failure! Cracking and peeling have left the binder directly exposed. Elements / seepage have destroyed the structure, while evaporating vital oils have left pavement dry and brittle. All pliability, ductility, and flexibility is gone! Your pavement will need to be replaced!



## **GSB-88**® – BETTER THAN A TYPICAL SEALCOAT



Gilsonite, discovered in the early 1860s in northeastern Utah, is a unique natural hydrocarbon high in asphaltenes (50-65%) and nitrogen compounds (2.5-3.5%).



Gilsonite is fully compatible with bitumen. As a resin, it can be melted into hot bitumen, added during the hot-mix manufacturing process, or blended into a preservation treatment as a uniform, easily workable product with minimal downtime.



- PROVEN, GSB® Works Better! - NAVFAC study compared 10 sealants, GSB-88® outperformed every sealant in wet track abrasion tests, increased permeability, reduced viscosity, and reduction of oxidation processes. AND GSB-88® was found to have the lowest life-cycle cost.

Awarded the Environmental Product Declaration (EPD)



Internationally accepted Life Cycle Assessment (LCA); GSB-88® received high scores in all categories. If utilized globally, GSB-88® could save 1.2 million metric tons of CO2 emissions per year and billions of dollars in savings.

- ASI (Asphalt Systems Inc.)

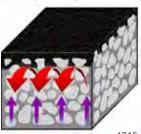
#### **Peanut-butter vs. Butter.**

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 therefore performance is tied directly to how much is left on top to protect the binder.

#### **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 flexibility inside.

**The GSB® Result:** <u>Unmatched Binder Strength!</u> Durability and bonding properties with high density – capable of preserving vital oils, pliability, ductility, and flexibility in pavements!



Original pavement performance is preserved for decades of trouble free pavements and load carrying capabilities.

Apply GSB-88® to pavements that are New, Good Condition, and/or still exhibit sound structural integrity.

#### **GSB-88® Extends County and DOT Pavements:**

- Apply over chip seals to bind down loose chips that are raveling.
- Apply to slurry coatings and microsurfaces to stop raveling and deterioration / halt chipping and peeling of the coating layer.
- Apply over centerline and shoulder rumbles where water stands to prevent water intrusion, flushing and water stripping.
- Apply over cold joints, where density may have been less than design and oxidation along with raveling have set in.



Making Good Pavements Last Longer

#### - Proven Benefits of GSB-88® -

- Longer Life Cycle, Lower Cost
- Halts Surface Oxidation / Weathering
- Penetrates into the Matrix
- Minimizes Closure / Downtime\*
- Improves Safety
- \* Frequently, GSB-88® treated roads are opened just a few hours after closure!

## 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!

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