

Seal-TiteTM

of Arkklahoma

Rhyno-TiteTM

**AN ENVIRONMENTALLY FRIENDLY
ALTERNATIVE**

Rhyno-TiteTM protects pavement from the
deteriorating effects of weather, UV, and
traffic wear

***Premium Asphalt Based Emulsion
Pavement Sealer with
High Solids Content
For Better Driving Surface and
Added Skid Resistance***

**Asphalt Pavement Sealers
Informational
& Comparative Guide**

INDUSTRY STANDARD

Asphalt emulsion-based sealers are the industry standard. **The Asphalt Institute** only recommends asphalt-based sealers and slurry seals. **They do not recommend sealers that contain coal tar.** Making this representation we are not intending to suggest that **The Asphalt Institute** recommends **Seal-Tite's™** sealer. However, we are stating that they have made their position known public and its on their website located at www.asphaltinstitute.org under FAQ section "Seal-Coats/Fog Seals."

Our contractors apply the material to meet the specifications established by the **Asphalt Sealcoat Manufacturers Association**. You may visit them at www.sealcoatmfg.org. Additionally, the contractor should provide you with his specifications.

PRODUCT APPLICATION

- Clean pavement of all dirt, dust and debris.
- Fill cracks and patch all broken and alligatored areas with either hot mix or a cold patch material.
- Prime all oil spots with a latex product.
- **Rhyno-Tite™** may be applied with a hand or motorized squeegee, or spray.
- Apply in any climate except raining or freezing weather with an additional additive, sunshine, wind, low humidity and elevated ambient temperatures will speed curing time.
- Can be diluted with clean, potable water. Mix dilution is a maximum of 20%. Do not over dilute the product as this will decrease the overall product performance and even lose viscosity which may cause the aggregate to fall to the bottom of the tank. Additionally, less water used to dilute will increase dry time. Product can be applied not diluting it at all.
- Product is completely cured when water dries completely from the top surface.
- For best results, use of "water-born" paint is recommended when striping seal coated areas.

Seal-Tite™ manufactures an asphalt emulsion-based pavement sealer, "**Rhyno-Tite™**." It is a heavy-duty sealer that is high in solids content that is designed for the sealing and resurfacing of asphalt playgrounds, parking lots (large or small), roadways, and traffic areas whether low- or high- traffic. It is factory-blended, combining specially selected proprietary fillers, aggregate, fiber, coloring agent, and film fortifiers that provide a skid resistant surface that greatly extends the life of the pavement. It is formulated using the most advanced polymer technology to provide improved curing characteristics, durability, adhesion, and color retention, therefore greatly extending the life of the pavement by completely sealing the surface of asphalt pavement to prevent penetration of moisture, the leading cause of pavement failure. Most importantly, all of the materials used are environmentally friendly. **There are no carcinogens.**

ADVANTAGES & BENEFITS of "Rhyno-Tite™"

- Increased Durability
- Increased Adhesion to Underlying Surface
- More Scuff Resistant
- Superior UV Resistance
- Faster Cure Rate than standard seal coats
- Earlier Striping and Traffic Release
- Nighttime Applications are possible where freezing or rain are not imminent
- Increased Flexibility
- Unsurpassed Moisture Resistance
- No PAH Threat to the Environment (PAH: polycyclic aromatic hydrocarbons, which is carcinogenic)
- **Environmentally SAFE**
- **Non-Carcinogenic**

MSDS readily available upon request

INFORMATION AND COMPARATIVE ANALYSIS

When we decided to enter into the asphalt pavement maintenance business the first thing we did was to decide whether or not to make our own sealer. It didn't take long to make that decision. The second thing we did was research which sealer to make. We analyzed all of them, **asphalt-based, coal tar** and even **acrylic sealers** were taken into consideration. After our analysis, the answer as to which sealer to make became clear. Hopefully, this information will be of use to you as well.

There are three types of asphalt pavement sealers available today, **asphalt-based, coal tar** and **acrylic**. We will disclose the good and bad of each for your consideration.

Asphalt-based sealers are made using asphalt emulsion which is asphalt cement emulsified with water using an emulsifier to homogenize and stabilize the emulsion. Asphalt cement is the binder used in asphalt pavement. Therefore, when you use an asphalt based sealer you are using the same product that was used to hold the driveway aggregate in place to begin with and you are adding back asphalt particles to the pavement which acts like a rejuvenator. Asphalt-based sealers are environmentally friendly and have no PAHs, which can cause cancer. Additionally, they do not check crack. Asphalt sealers and slurry seals are the recommended preventative maintenance technique by The Asphalt Institute. **They do not recommend the use of sealers that contain coal tar.** This is documented on their website located at www.asphaltinstitute.org.

Coal tar sealers have been widely used to sealcoat pavements because of its superior resistance to gas, oil and chemical spills. However, coal tar adds nothing back to the pavement. Additionally, coal tar is not environmentally friendly and contains PAHs, which are carcinogenic, meaning they **DO** cause cancer. Due to a shortage in coal tar pitch, coal tar sealers have increased in price substantially, leaving asphalt-based sealers less expensive than coal tar sealers. California prohibited the use of coal tar sealers years ago, Austin, Texas prohibits the use of coal tar sealers within their city limits and Dade County, Wisconsin prohibits the use of coal tar in the entire county. Additionally, there are other municipalities considering similar actions.

Acrylic sealers are the least widely used sealers in existence today. They add nothing back to the asphalt pavement and while they are not carcinogenic they certainly cause other health discomforts like dizziness, weakness, nausea, headaches, and even worse, possible gastrointestinal irritation. Prolonged exposure to acrylic sealers can cause damage to kidneys, lungs, blood and central nervous system. Repeated ingestion may cause liver damage. Having written that long list of encouraging effects, acrylic sealers do resist gas, oil, and chemical spills. One more thing to keep in mind is the price. Typically, they are more expensive than asphalt-based or coal tar sealers.

Our research was clear and can be simplified by asking for an MSDS (**Material Safety Data Sheet**), which will confirm our findings. The suppliers are required to provide you with an MSDS if you ask for one. We have prepared a chart for your reference. We compared the sealers available today to a fictitious perfect sealer, which we all know doesn't exist. Obviously, the greens are positive and the reds are negative characteristics.

	Asphalt Sealers	Coal Tar Sealers	Acrylic Sealers	Perfect Sealers
Affordable	Yes	No	No	Yes
Contain PAHs	No	Yes	No	No
Considered Friendly	Yes	No	Yes	Yes
Politically Attached	No	Yes	No	No
Add Back Particles	Yes	No	No	Yes
Physically Discomforting	No	Yes	Yes	No
Supported by Asphalt Institute	Yes	No	No	Yes

As a supplier, contractor or consumer, at some point each and every one of us has to take responsibility for the environment and not only our health, but the health of others. Especially if you are a supplier or a contractor you should take this report into serious consideration. If a customer or employee comes down with cancer it may be possible that attorneys and the courts will attempt to hold everybody responsible if a lawsuit is filed. Of course, we are not attempting to practice law. In fact, if you are a supplier or contractor that sells or uses coal tar I encourage you to seek legal counsel.

Seal-Tite™ has licensed the mix design and manufacturing process. For complete details please contact the plant nearest to you or call us and we will be happy to refer you to a plant or distributor near you.

Seal-Tite™ licenses its mix design, process, procedures, and raw materials. The Licensees are responsible for mixing the sealer to specifications established by Seal-Tite™ and the Asphalt Sealcoat Manufacturers Association. Since we are not on location, we do not guarantee the Licensees sealer. Any warranties or guarantees come from the Licensee. Please visit with your contractor regarding warranties or guarantees.

Referencing the Asphalt Sealcoat Manufacturers Association or The Asphalt Institute we are not suggesting or intending to suggest that either association recommends Seal-Tite™ and it should not be interpreted in that manner. We value their research and are directing you to their research which is public information.

***DISCLOSURE:** This report is for informational purposes only. It is not intended to give legal, environmental, geological, or business advice. We obtained this information from sources we believe to be reliable, but we have not hired independent advisors or experts to verify the information contained within.*

Seal-Tite™ does not intend for it to be interpreted that any agency, association or municipalities referenced in this report endorses Seal-Tite™ or its products.

It may be viewed that Seal-Tite™ has a conflict of interest publishing this report by the fact that we only manufacture an asphalt emulsion-based sealer. However, keep in mind that we decided to manufacture an asphalt based sealer while considering the manufacturing of coal tar and acrylic sealers. It has only been through extensive research and analysis that we decided to manufacture an asphalt based sealer.

Seal-Tite™ encourages suppliers and contractors that sell or apply coal tar sealers to seek legal counsel that has knowledge regarding product liability, employer liability, EPA expertise and general liability. Generally speaking, but not in all situations, general practice attorneys have little knowledge regarding these issues.

Seal-Tite™ does not guarantee that any asphalt pavement sealer is safe. As a society, our knowledge expands and we have no way of predicting the future. Our position is based on current knowledge obtained by others as this is a very difficult and sensitive topic.

Our intentions are not to use this information against manufacturers or suppliers, but to educate any person on the potential dangers of using asphalt pavement sealers. Our intentions are to make it a safer world, environmentally and ecologically, and to minimize health risks.

Seal-Tite™ encourages the reader to perform their own research and there certainly are many resources available. References will be made available upon request.

Seal-Tite™

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