

Diamond Shield Fortifier LLC 1-877-602-5062 3637 Metro Parkway San Antonio, TX 78247 www.DiamondShieldFortifier.com

# **Diamond Shield Fortifier**

TECHNICAL DATA SHEET Last Rev Date: Aug 2008

Freezability: Do not freeze

Shelf Life: 1 to 2 years
Color Blue liquid

Flammability: Non-Flammable

Usage recommendation: 1/2 gallon to 3/4 gallon of DSF per 100 gallons of raw seal coat

used.

Container size: 2-gallon pail (19 lbs)

### DSF is

Diamond Shield Fortifier (DSF) is a liquid composition, active curing additive. It makes sealer easy to broom through its enhancement of rheology modification and causes broom, squeegee marks and cut lines to seem to vanish when the film has dried. DSF works with asphalt, coal tar and blended emulsions all three.

DSF functions safely and significantly to reduce the amount of time required for a surface coating to be reintroduced to vehicle traffic without damage to the film. This is because DSF works within the film to actively express water with or without the suns help.

## **Viscosity Modification and Sand Suspension (USS)**

DSF is NOT a latex based additive. DSF does NOT contain any acrylic or resin hardeners known to cause seal coat cracking and flaking prematurely like some other additives. DSF improves the flexibility of the cured film and improves bonding and film strength.

DSF's Ultimate Sand Suspension (USS) provides better sand load suspension for a longer period of time than other additives because it causes an energy that causes the sand to cling to the seal coat. As a result contractors report no sand left in the bottom of the tank after they have sprayed out. All the sand, not just most of it, goes into the job.

DSF reduces filter and tip clogging and provides a deeper, black finish. DSF's rheology modification makes sealer smoother and silkier while lubricating pumps and equipment and allowing for easier clean up. DSF will not harm equipment or set up in the tank. Broom marks and cut lines simply disappear.

## **Benefits of Active Curing**

DSF will extraordinarily increase your productivity and bottom line in the normal season while extending your season at both ends for even more profits. You can complete more jobs each month with the same number of man-hours because jobs can be completed and opened the same day without the return trip the next day. Fewer return trips equals less fuel, labor and equipment maintenance costs per job. More time for more jobs with lower job costs equals a much higher profit margin.

Under all conditions including cooler temperatures, in shaded areas and when the sun is not present, except for excessive humidity or ground saturation, DSF will accelerate the cure time of your sealer. Because of this, DSF reduces risk. Over and over contractors report having had their job rained on after it dried the same day of seal coating and praise DSF because the sealer didn't wash. DSF also allows you to do night work because it can cure without sun. Many contractors are doing night work in such places as fast food restaurants in one or two nights instead of multiple moves.

### **Active Cure vs. Passive Cure**

DSF works through a patented Active Cure Technology. Until DSF, seal coat could only cure through the passive curing process. This requires the sun to naturally cure a film when its heat and ultra violet rays are applied. DSF is the only patented active curing process on the market. Latex based products have no active curing property and also require the sun and the heat of the passive curing process for a seal coat film to cure when used. The process of sun and heat curing seal coat is slower because the top of the film is closest to the source and thereby cures first and creates a barrier that slows down the dry and cure time for the rest of the film below the top. That's why it is recommended to wait a minimum 24 to 48 hours before the film is reintroduced to vehicle traffic when using only the passive curing power of the sun and heat.

In contrast, DSF's Active Cure Technology creates heat and energy <u>within</u> the film. This heat and energy from within expels the moisture from the very bottom up and through the top. This active cure technology thereby works together with the passive curing process to give you the fastest and most consistent cured film known to man. With DSF when the film is dry to touch and no longer tacky under foot, all moisture has been expelled allowing you to reintroduce vehicle traffic in only just a few hours after the job has been completed in most cases instead of 24 to 48 hours. No other product on the market does this.

Most "set-fast" or "dry-fast" products are latex based or contain hardeners. Because latex does not have the ability to make the sealer cure quicker, there is no comparison to DSF. Latex causes the skim over drying effect on the surface of the seal coat to happen faster which traps moisture within the seal coat. This can actually further extend the time needed for enough curing to occur to reintroduce traffic because moisture gets trapped in the film longer. Set fast products that are not primarily made of latex are hardeners. These products can make the film brittle and cause premature flaking. DSF, on the other hand, safely does the same curing work the sun does through Active Cure Technology within the film. If you put down a quality seal coat application, DSF will accelerate the cure time safely on every time making every job the quickest and best job possible.

DSF turns your sealer ultra black every time, because the faster sealer cures the blacker it turns. DSF virtually eliminates tracking and sand roll out. DSF reduces costs and increases profits by helping contractors get the job done the first trip. Because of this, with DSF you can increase the number of jobs completed each month with the same man-hours you have been using. This benefit of time savings to the customer along with less down time for jobs such as restaurants or hotels add up to higher value and therefore a higher bid can be justified as well. In this way, DSF pays for itself and builds the contractor a better reputation for providing fast turnaround on jobs and a greater flexibility of services to the customer. Therefore, contractors not using DSF are actually loosing time and money.

### **Directions:**

No stirring or diluting DSF is necessary prior to adding DSF to the sealer. Use 1/2 gallon to 3/4 gallon of DSF per 100 gallons of raw sealer. Open container and pour contents into your normal mixture of raw sealer cut with your normal amount of water used and mix in well prior to sand load. It is NOT recommended to use DSF with latex based additives because their processes work against each other and will make the cure time longer. Therefore, you waste your money. DSF is all you need. Observe all seal coat manufacturer guidelines when using DSF. If sealer seams thicker than desired ad a little more water until correct consistency is reached and use a little less DSF on your next mix.

CAUTION: Dispose of container and unused contents in accordance with Local, State, and Federal regulations. EMPLOYERS should obtain a copy of the Material Safety Data Sheet (MSDS) from your supplier or directly from our website www.diamondshieldfortifier.com. Do not heat container, store at temperatures greater than 140° F or store in direct sunlight. DO NOT ALLOW THIS PRODUCT TO FREEZE!

Warning! DO NOT TAKE INTERNALLY! Use eye protection to avoid contact with eyes. In case of eye contact, open eyelids wide and flush immediately with plenty of water for at least 15 minutes. Use protective measures to keep off of skin. Wash off well if product comes in contact with skin. If swallowed, CALL PHYSICIAN IMMEDIATELY! GET MEDICAL ATTENTION. KEEP OUT OF REACH OF CHILDREN!

#### WARRANTIES:

We, the manufacturer, warrant only that this product is free of defects since many factors which affect the results obtained from this product such as weather; workmanship, equipment utilized, and prior condition of the substrate are beyond our control. We will replace at no charge any product proved to be defective within 12 months of purchase if proof of purchase from an authorized distributor is provided. DISCLAIMER OF The Limited Warranty is IN LIEU OF any other warranties express or implied including but not limited to any implied warranty of MERCHANTABILITY or fitness for a particular purpose; and we, the manufacturer, shall have no further liability of any kind including liability for consequential or incidental damages resulting from any defects or any delays caused by replacement or otherwise.