

# Rosphalt® 50

Rosphalt® 50 is a concentrated thermoplastic polymeric asphalt additive supplied to batch or drum plants in a dry powder form. When added at forty five (45 lbs) pounds per finished ton of asphalt mix (in a job mix formulation design with target air voids of 1% to1.5%). Rosphalt® 50 provides a waterproofing wear- course that is highly resistant to rutting and shoving and is also Fuel Resistant.

Common applications are new and replacement overlays on composite, orthotropic steel, post tension box girder, steel grid, wood and other common bridge decking that require corrosion protection and a high performance, long lasting wearing course. Additional applications include road areas requiring high performance, rut and shove resistant pavements such as high traffic intersections, entrance and exit ramps, terminal turnarounds, toll booths, airports, ports & terminals and auto racetracks.

FEATURES	BENEFITS	
Integrated waterproofing & wearing course	One step installation	
Uses standard paving equipment	No specialized equipment required	
Lifespan of 3.5 times traditional HMA	Reduced life cycle costs	
Rapid return to service	Ideal for high traffic elevated structures	
Dry mix additive	Easily purchased and transported	
Rut & Shove Resistant	Longer Lasting Pavement	
Fuel Resistant (FAA P-401)	Longer service life	

# **ADVANTAGES**

<u>Easy Installation</u>: Use of standard paving equipment and one-step integral waterproofing wearing course allows for rapid installation. Providing labor savings and quicker return to service when compared to competitive technology

Rapid Return to Service: Rosphalt® overlays can be returned to service in as quickly as 1 hour (when pavement cools to 140°F).

<u>Life Cycle Costs</u>: Based on beam fatigue test data, Rosphalt® 50 mixtures have a typical life span of 3.5 times traditional PG64-22 polymer modified asphalt concrete pavements. This 3.5 times life span increase reduces the life cycle cost when using Rosphalt® 50 mixtures, creating an advantage when compared to alternate technologies.

<u>Rut & Shove Resistance</u>: Based on independent lab testing performed by the Asphalt Institute and Worcester Polytechnic Institute, Rosphalt® 50 mixtures exhibit almost 2/3 less rutting than PG64-22.

INDEPENDENT TEST DATA OF PG64-22 WITH ROSPHALT® 50			
Properties	Test Method	Result	
Color	Black		
Shelf Life	1 Year		
Performance Grade (Note 1)	AASHTO M320	Table 1 PG 94-34 Table 2 PG94-34	
Table 3 will be provisional specification		Table 3 PG70E-34 (E) Extreme	
Hydraulic Conductivity*	ASTM D5084	Impermeable10e <sup>-7</sup> or higher	
Permeability (In-Situ)**	ASTM C1202	454.5 to 517.5 coulombs	
Chloride Penetration	AASHTO T260	.02%	
Beam Fatigue	AASHTO T321	> 250,000 cycles	

<sup>\*</sup> Property values include AASHTO Standards. The -34C can be verified from mix testing in IDT (Indirect Tensile Test)

# **USES**

# Application

- · Nosing material in expansion joints
- Rut & shove resistance pavement

#### Locations

- Bridge decks & Approaches
- Airport Runways / Taxiways (Fuel Resistant)
- Toll Booth Areas
- Parking Garages
- · High Traffic Intersections
- · Race Tracks (Fuel Resistant)

### Substrate

- Concrete
- Asphalt
- Steel
- Composite
- Wood

Revised: December 2017 Page 1 of 2

<sup>\*\*</sup> Full reports listed as part of In-Situ Test Report





#### **LIMITATIONS**

- Minimum installation surface and substrate temperature of 40°F (Radiant heaters on the pavers can be used to operate in lower temperatures. Contact Chase for additional information.)
- For additional product limitations, reference the most current version of the "Rosphalt® Installation Guidelines".

# MANUFACTURING AND INSTALLATION INSTRUCTIONS

The Rosphalt<sup>®</sup> 50 additive is blended in the batch or drum plant with the aggregate prior to the addition of the liquid asphalt binder. In batch plants, the additive is added and blended with the aggregate for 10 seconds. Then the liquid asphalt is added and blended for an additional 70 seconds minimum for a total batch blending time of 80 seconds. Rosphalt<sup>®</sup> mixtures must be transported in tarped trucks to minimize heat loss during transit to the job site.

Please see the most current version of the "Rosphalt® 50 Installation Guidelines" for detailed manufacturing, quality assurance and installation instructions.

## **ESTIMATING QUANTITY**

Asphalt mixes containing the Rosphalt® additive typically weight approximately 150 lbs per cubic foot but will vary depending on the JMF characteristics. This equates to approximately 25 lbs per square foot when compacted to a 2" depth resulting in a yield of 80 square feet per unit of Rosphalt®.

#### **AVAILABILE QUANTITIES:**

22.5lb polyethylene bags (2 per unit)

Super Sacks (approx. 35 units)

**Bulk Tanker** 

Colors: Black

#### **STORAGE**

DO NOT ALLOW PRODUCT TO FREEZE. Store in a dry area at temperatures between 50°F and 95°F (10°C - 35°C) in the original unopened containers.

#### **CAUTION**

The data contained herein reflects internal testing conducted by the manufacturer and by third parties who are responsible for the accuracy of the information. This document is not to be construed as a specification or specific application process. Chase Corporation assumes no liability outside specific limits specified herein.

# **Contact Chase Construction Products**

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Revised: December 2017 Page 2 of 2