

AQUAPHALT®—SUSTAINABLE COLD MIX

TECHNICAL DATA SHEET

Manufactured by: RoadStone Production LLC, 1230 River Road, Charlottesville, VA 22901

Product Description:

Aquaphalt® is a revolutionary, high performance, flexible, reactive repair product for use in repairing asphalt and concrete road surfaces. Aquaphalt® reacts with water to provide a permanent repair solution. All sizes of Aquaphalt® are free of solvents or volatile organic compounds (VOC's). Aquaphalt® comes in three (3) sizes (4.0mm, 6.0mm, & 9.0mm) for surface, intermediate or base repairs for any type of asphalt or concrete road repair.

Applications: Highways (asphalt or concrete), Runways/Taxiways/Aprons, Bridge Decks, Manhole repairs, Potholes, Utility Cuts, Parking Lots, Driveways, Tennis Courts, Pathways

Performance Features:

Permanent Solution – Aquaphalt® is comparable to typical hot mix asphalt pavements in quality and unlike other conventional cold patch asphalt products which never deliver a truly permanent repair.

Cost Effective – Aquaphalt® saves time and money by eliminating costly repeat repairs.

Environmentally Sustainable – Aquaphalt® contains no toxic solvents of VOC's, making it friendlier to the environment.

Directions for Use:

Remove all loose material from area to be repaired. Place Aquaphalt® in the patch and level with a rake or trowel. Allow 0.5" -1.0" additional height for compaction. Saturate with water (use approx. 1/2 gallon of water to 50 lbs. Aquaphalt®) and compact. If the depth of the pothole is greater than 2-3", it is advisable to fill the hole in two layers. In colder weather a freezing point suppression additive may be added to the water prior to saturation (i.e. road brine, salt water, etc.)

Clean Up:

Use Automotive hand cleaners on hands and tools. Tools may also be cleaned with light oil, mineral spirits or vegetable oil.

Storage and Handling:

Each bucket of Aquaphalt® contains approximately 50 lbs. of material. Store Indoors in cool, dry conditions. Avoid direct sunlight and/or exposure to freezing. Aquaphalt® can be applied in freezing conditions, but workability is best when it is stored indoors.

General Advice:

Aquaphalt® hardens quickly for immediate use. After water is applied, Aquaphalt® will start to cure in 15 minutes and can be opened to traffic immediately. The reactive process happens relatively quickly and Aquaphalt starts to get hard and in most cases, will be fully cured in 24 hours.

Since Aquaphalt® does not release any harmful VOC's it can be sealed 24 hours after installation.

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Material Specifications:

Aquaphalt® is designed and performance tested using AASHTO and ASTM testing specifications related to Hot Mix Asphalt.

AASHTO M-323 (Table 3)

Gradation Control Point Ranges:

Sieve Sizes	4.0 mm % Passing	6.0 mm % Passing	9.0 mm % Passing
1/2" Sieve	100	100	90 – 100
3/8" Sieve	95 -100	90 -100	90 max.
#4 Sieve	90 -100	90 max.	
#8 Sieve		32 -67	28-58
#16 Sieve	30-55		
#200 Sieve	6-13	2-10	2-10

AGGREGATES:

All aggregate materials are a non-polishing, crushed granite from an approved Virginia DOT source.

All aggregate materials are quality tested and having the following properties:

- AASHTO T-85,84/ASTM C-127,128 Specific Gravity ≤ 3.000 .
- AASHTO T-176 SE value > 80
- AASHTO T-304 FAA value > 45
- AASHTO T-11/ASTM C-117 % passing 75- μm (No. 200) < 7.0
- AASHTO T-27/ASTM C-136 Uniform consistency of material

BINDER:

The binder of – Aquaphalt® is a proprietary liquid blend that contains renewable natural raw materials. **Reactive Binder** is a further development of the “Raps-Asphalt” technology. “Raps-Asphalt” is a plant based binder with bitumen, a naturally occurring organic byproduct of organic materials representing a total weight of approximately 5-8% of the finished product; this binder contains natural rape seed oil which improves stability.

Quality and Performance Specifications:

Each production run of Aquaphalt® product is quality and performance tested to insure consistently superior performing material. Each product is evaluated using AASHTO and ASTM testing specifications related to Hot Mix Asphalt.

- AASHTO T-308 - to insure Aquaphalt® product has 5-8% proprietary binder and obtain raw aggregate.
- AASHTO T-11/ASTM C-117 - to determine % passing 75- μm (No. 200) of product blend.
- AASHTO T-30 - to determine products conformance to design gradation ranges.
- AASHTO T-209 Method A (Air) - to determine the Maximum density of each Aquaphalt® product.
- AASHTO R-68 - to make samples for;
- AASHTO T-245 - to determine the Stability and Flow of Aquaphalt® products using the air bath procedures.
- AASHTO TP-43 - to determine the workability of Aquaphalt® product at $4 \pm 1^\circ\text{C}$ ($39.2 \pm 1.8^\circ\text{F}$)
- Other AASHTO/ASTM specified testing methods per various DOT requirements.

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Guarantee:

RoadStone Production LLC, a Virginia limited liability company (RSP), provides an **unlimited** “CURING GUARANTEE” to the Customer that Aquaphalt® product[s], produced by RSP LLC, and sold by its authorized Distributors will cure, upon proper installation – as directed in written form by the manufacturer and applicable standards – within a reasonable time frame (24 hours to 120 hours) from the date of installation.

See website for more details. www.aquaphalt.com