

A TTM Quick Note!

The Proven, One Time Fix for Asphalt and Concrete, Even In Winter

Background

RepPhalt FS is a ready-to-use, permanent repair solution for asphalt and concrete applications. **RepPhalt FS** is water activated and uses a proprietary blend of organic additives that are environmentally friendly, safe, and non-toxic. It produces no hydrocarbon leaching or evaporation and can be used in all types of weather – cold, warm, wet, or dry.

This proprietary product has stood up to the test of time, in large and small-scale projects, and has proven to be a truly permanent repair solution that performs as well, or better, than hot mix asphalt, not to mention cold mix – all while being environmentally friendly.

Use as a permanent repair of potholes and other deficiencies in concrete or asphalt roadways. **RepPhalt FS** can be quickly applied to all volume roadways in most climate conditions, reducing the impact to the traveling public. It is readily available whereas hot mix asphalt may not be due to weather events, remote locations, or where emergency patch situations are required.

Weather

RepPhalt FS has been tested in temperatures as low as -10° Centigrade (50F) and found that temperatures as low as this did not have the reaction needed due to the solidification of water when it becomes frozen. The testing did find however, once temperatures had risen and thawed the water, the hardening components were then activated, and the mixture hardened. The high end recommended temperature for application should not exceed 50° Centigrade (122F). Based on data collected when tested according to AASHTO T-324-14, **RepPhalt FS** met typical specifications for rut depth and stripping inflection point when held at 50° C. Data has not been collected at temperatures above 50° C, therefore the recommended temperature for applications should be between -10° C (50F) to 50° C (122F).

Factual Points

- Permanent asphalt repair product. No need for temporary repairs due to rainy or wet weather
- Easy – pour, add water, and tamp
- 1 of only 3 Water activated cold mix patching asphalt sold throughout the U.S. & exceeds the others in all aspects.
- Rapidly cures, can open to service. Traffic aids in compaction
- Sets-up to 2800 lbs. stability (concrete is 3000 lbs.)
- Cures even under water
- Can be topped with a seal coat after one-hour
- Tested temperature installation range 12 - 122 degrees Fahrenheit.
- It has been used in subzero temperatures
- 3 Year Limited Warranty against rutting out or **RepPhalt FS** is replaced for free
- Saves Money – eliminates repeat repairs
- Cost a little more upfront than cold mix products, but it is a permanent one-time repair
- No need to pay for products, a crew and equipment cost a second and third time.
- Strongest Cold-Patch asphalt material sold in the U.S.
- 20,000 passes on the Hamburg Wheel Tracking Test. (No other cold-patch product can show these results.)



Composition of Materials

Like its counterpart hot mix asphalt, **RepPhalt FS** is comprised of aggregates and asphalt binder along with proprietary components that make the product unique. Aggregate materials are a blend of crushed limestone and sand from DOT approved sources. The material has the following properties: ASTM C-127, 128 Absorption = 2.5% max. The current combined blend of aggregate materials is presented below.

Sieve	Percent Passing	Specification
½"	98	90-100
3/8"	91	
#4	73	
#8	54	28-58
#16	41	
#30	30	
#50	20	
#100	11	
#200	7.8	2.0-10.0

The asphalt cement utilized meets the requirements for a PG64-22 binder which is integrated with other proprietary oils to contribute between 5.0-8.0% of total mixture by weight.

Coverage

50lb / 22.7kg PAIL usage guide		
Repair area dimension	Hole Depth	Total bags needed
2' x 2' (.61m x .61m)	2" (5cm)	2
2' x 2' (.61m x .61m)	3" (8cm)	3
2' x 2' (.61m x .61m)	4" (10cm)	4
3' x 4' (.94m x 1.2m)	2" (5cm)	6

Quick Application Notes

1. It is recommended that you wear impervious gloves such as nitrile when working with any asphalt material. Follow these procedures when applying **RepPhalt FS** Fast Setting Blacktop Permanent Repair.
2. Square cut the vertical sides of the hole to provide for proper confinement of the patch Remove all loose material. Sweep the area thoroughly.
3. Apply **RepPhalt FS** at a depth of 1 in – 4 in (25-100 mm). Apply in 2 in (50 mm) lifts so that adequate compaction of each layer can be accomplished before more material is added. Repair areas over 2 in (50 mm) in depth must be applied in 2 in (50 mm) lifts which must be adequately compacted before additional material is added. **You may seed or fill deep holes with hard aggregates or fill that has been removed and compacted.**
4. The application should not be less than 1 in (25 mm) thick after final compaction. Fill the hole with **RepPhalt FS** to a height of .5 in (13 mm) crowning above the surrounding area
5. Compact to a level surface with a Mechanical or hand tamper. Apply additional water to the surface of the compacted area; enough that there is standing water on the surface.
6. Pour water evenly across the entire repair. Approximately 1 pt. (0.5 L) of water per square foot of area. Repeat for each layer.
7. Avoid dry turning tires on patched area until the material has hardened sufficiently (certain weather conditions may extend this period). Typical times can range from 1 to 5 hr.
8. **RepPhalt FS** is not designed for curbs or other unconfined areas or designed to replace the use Hot Mix Asphalt for large areas such as entire driveways or parking lots.