

PLASTILINE® Cold Asphalt Pothole Repair

INTERIOR & EXTERIOR

WATER BASED

1K

Description:

A one component, water based, cold asphalt pothole repair mix with superior bonding strength, binding the aggregates tightly together to produce a strong, trafficable, long lasting and skid resistant waterproof surface.

The material can be mixed on-site with aggregate or supplied as a pre-mixed solution.

Intended Uses:

PLASTILINE® Cold Asphalt Pothole Repair Mix is designed to restore both interior & exterior asphalt, concrete and dirt road surfaces. This product can be used for creating new skid resistant road surfaces or for repairing potholes & heavy-duty re-surfacing on existing road surfaces.

This repair system is suitable for use on national, primary and secondary roads which includes warehouses, driveways, parking lots, highways, intersections and rural roads.

This product will adhere directly to surfaces, eliminating the need for a primer before application (Water can be used as a primer). In the case of high specification roads however, engineers may require a conventional primer or tack coat.

Features & Benefits:

- Cold Applied – No flames or heat required.
- Doesn't bleed in hot weather like typical asphalt does.
- No lateral movement.
- Not sensitive to climatic conditions (Can be applied in sub-zero temperatures/ temperatures above 50°C).
- Can be applied at a minimum compacted thickness of 10mm as opposed to conventional asphalt, which has a minimum thickness of 20mm.
- 25% more volume or surface coverage per ton can be achieved in comparison to conventional premix due to the lighter kg per m³ of the product and the zero-wastage factor.
- Environmentally friendly.
- Exceptional adhesion to existing asphalt.
- Hard wearing.
- Easy and fast to install
- No primer required (Water can be used to prime surface).
- Waterproof.
- Anti-skid.

Certifications:

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Technical Data:

Product Physical Form	Solid Granular mmix
Binder Type	Bituminous
Colour	Black
Appearance	Rough / Granular Surface (Tacky when wet)
Coverage	25 Kg bag will yield +/-0.85m ² @ compacted thickness of 15mm.
Pack Size	25 Kg Bags
Storage	Store out of direct sunlight in dry conditions between 15°C and 25°C

TRAFFIC MARKINGS: BITUMINOUS PRODUCTS | REPAIR SYSTEMS

Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

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Latest Update:
09/06/2025
Issue Date:
06/02/2025

Shelf Life	12 months when stored as recommended in original un-opened/sealed containers. Opened products can be reused within 14 days, as long as the unused material was kept covered & out of direct sunlight. Before reusing, add a little water to reactivate the mix.
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Testing Results:

Traffic class	E 4		E 3		<E 2		Properties
Property	Min	Max	Min	Max	Min	Max	
Bulk relative density (kg/m ³)							2189
Marshall Stability (kN)	8	18	7	15	4	10	8.5
Marshall Flow (kN/mm)	2	4	2	4	2	5	2.7
Stability / Flow (kN/mm)	2.5	-	2	-	2	-	2.8
Indirect Tensile Strength @ 25°C (kPa)	800	-	800	-	800	-	851
Air Voids in mix (%)	3	6	3	6	2	5	5.0
Immersion Index (%)	75	-	75	-	75	-	94.2
Filler / Binder ratio	1	1.5	1	1.5	1	1.5	1.1
Air permeability (x10 ⁻⁸ cm ²)	-	1	-	1	-	1	0.365
Voids in mineral aggregate (%)	16	-	16	-	16	-	17.5
Film thickness (µm)	5	-	5	-	5	-	8.8

Important Information:

- Always consult with technical department if unsure.
- Technical & application data herein is for the purpose of establishing a general guideline of the repair/resurfacing material application procedure.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection & verification of the performance and use of this product.

Surface Preparation & Application:

Recommended Application Procedure (Roadworks & Surfacing Using Machinery)

1. **Engage an Earthworks Contractor:** Appoint a qualified earthworks contractor to shape and compact the area designated for surfacing. The work must adhere to the specified compaction standards and tolerances outlined by the relevant Civil Engineering authority.
2. **Vegetation Removal:** Eliminate any existing vegetation through appropriate chemical means.
3. **Installation of Stormwater Drainage:** Install stormwater cutoff drains, along with the necessary pipes and catch pits, to ensure proper management and runoff of stormwater.
4. **Road Base Preparation:** If the objective is to surface an existing dirt road, it may be necessary to apply a base stabilizing agent to reinforce the in-situ soil, or alternatively, import a suitable base material to form a strong foundation layer.
5. **Dust Control:** Lightly prime the completed base with water to suppress dust. It is recommended to perform three passes with a water truck, ensuring that excess water is swept off the surface.
6. **Material Application:** Use a conventional premix laying paver to apply the material at the required thickness.

7. **Post-Laying Watering:** Immediately after laying the material, spray water to assist in achieving the desired finish. Again, three passes with a water truck are recommended.
8. **Compaction:** Follow the specified compaction procedures according to the road specifications. It is advisable to use a 2 to 4 metric ton roller with vibration, although due to the light compaction requirement, heavy-duty rollers without vibration are suitable. For optimal results, a pneumatic roller should be used to achieve an excellent finish. A steel roller can be applied within 24 hours for final finishing.
9. **Roller Wheel Moistening:** Ensure the wheels of the rollers remain moist during the compaction process. This will facilitate the migration of fines to the surface, effectively sealing the road during compaction.
10. **Best Practices:** For optimal results, follow the recommended procedures and equipment specifications to achieve a durable and smooth road surface.

Recommended Application Procedure (Roadworks & Surfacing Using Labour)

1. **Base Preparation:** Prepare the base in accordance with road construction specifications, utilizing the appropriate machinery for the task.
2. **Moistening the Ground:** Slightly moisten the ground using a watering truck or watering cans to assist in the compaction process.
3. **Bag Placement:** Place material bags at 1-meter intervals on the prepared base to ensure uniform distribution.
4. **Bar Placement:** Depending on the desired thickness, position measured square metal bars on both sides of the lanes to maintain the correct thickness and width for each lane of the road.
5. **Material Spreading:** Open the bags and evenly distribute the material across the base using rakes.
6. **Surface Smoothing:** After spreading the material, use a T-bar to drag the surface and ensure an even and smooth finish. Fill any voids or depressions with additional material to achieve a level surface.
7. **Watering:** Spray water over the laid material using a watering truck or watering cans to aid in settling and further compaction.
8. **Compaction:** Perform light compaction using a 2 to 4 metric ton roller with vibration. For roads with higher specifications, it is advisable to use a pneumatic roller. If using heavy-duty steel rollers, ensure compaction is carried out without vibration. It is essential to keep the roller wheels moist during compaction.
9. **Curing Time:** Allow the road to cure for 4 to 8 hours before opening it to traffic, depending on weather conditions and the moisture level of the mix, to ensure optimal results.

Recommended Application Procedure (Repairing Potholes & Patching)

1. **Preparation:** Square off the pothole using a pick and spade. Remove all grass, weeds, and loose debris. Use a chemical treatment if necessary to eradicate vegetation.
2. **Base Filling:** If the pothole depth exceeds 30mm, fill it with crusher run or an equivalent material, leaving a maximum depth of 30mm to optimize cost and material usage. Compact the base thoroughly using a small Bomag, hand stamper, or vibrating stamper to ensure a solid foundation. Ensure the surface is free from loose material.
3. **Surface Preparation:** Slightly dampen the pothole surface and edges. Pour PLASTILINE® Cold Asphalt Pothole Repair Mix into the pothole, distributing it evenly with a rake. Spread the material uniformly to achieve a smooth and level finish.

4. **Compaction & Sealing:** Extend the asphalt layer approximately 20mm beyond the edges of the pothole and maintain a thickness of 5mm to 10mm above the surrounding road surface. Lightly sprinkle water over the material using a watering can. Compact the asphalt using a hand stamper or pedestrian roller, ensuring the roller wheels remain wet during the process. The combination of water and compaction will bring fines to the surface, effectively sealing the pothole.
5. **Final Steps & Traffic Readiness:** The pothole is ready for traffic immediately. However, if applied at intersections or high-turn areas, allow 1–2 hours for proper setting.
6. **Alternative Filling Method:** If crusher run is unavailable, PLASTILINE® Cold Asphalt Pothole Repair Mix may be used to fill the entire pothole by applying it in layers of no more than 40mm, compacted to 30mm at a time. Apply additional layers as needed, following the same procedure. If the pothole depresses after initial compaction, apply additional material after 24 hours. For deep potholes, overfill by 15mm to 20mm above the surrounding road surface to prevent future depressions.

Application Areas	National Roads:	
	Yield per ton	17m ² @ 30mm
	Application Thickness	Apply at 40mm compacted to 30mm
	Extra Information: • Open to light traffic immediately after compaction, in heavy traffic open after 12 hours.	
	Primary Roads:	
	Yield per ton	24m ² @ 20mm
	Application Thickness	Apply at 30mm compacted to 20mm
	Extra Information: • Open to light traffic immediately after compaction, in heavy traffic open after 4 - 8 hours (Depending on weather & wetness of mix)	
	Secondary, Rural, Farm Roads & Car Parks:	
	Yield per ton	34m ² @ 15mm
	Application Thickness	Apply at 20 mm compacted to 15mm
	Extra Information: • Open to light traffic immediately after compaction, in heavy traffic open after 4 - 8 hours. (Depending on weather & wetness of mix)	
	Driveways, Minor Existing Roads (Light Traffic):	
	Yield per ton	50m ² @ 10mm
	Application Thickness	Apply at 15 mm compacted to 10mm
	Extra Information: • Open to light traffic immediately after compaction, in heavy traffic open after 4 - 8 hours. (Depending on weather & wetness of mix)	
Thinner	Clean Water	
Work Stoppage	Do not allow material to remain on equipment after use, thoroughly flush and clean all equipment with Water . If not all m	
Clean Up	Clean all equipment immediately after use with Water . If the products dry though, clean with SA 65 Thinner .	

Systems:

Consult with Specialized Coating System for application specific recommendations.

Safety Information:

- Refer to product SDS for health & safety prior to using products.
- Always wear safety clothing / protection. Respirators, eye protection and skin protection.
- Apply in well-ventilated areas.

