

TECHNICAL DATA SHEET & INSTALLATION GUIDELINES

AQUA PATCH

BACKGROUND

AQUA PATCH is a ready-to-use, permanent repair solution for asphalt and concrete applications. AQUA PATCH is a liquid activated asphalt concrete product and it uses a proprietary blend of organic additives that are environmentally friendly, safe and non-toxic, to produce a chemical hardening of the asphalt mixture. It produces no hydrocarbon leaching or evaporation and can be used in all types of weather – cold, warm, wet or dry.

RECOMMENDED APPLICATIONS FOR USE

AQUA PATCH is recommended for use as a permanent repair solution for well-defined potholes greater than 25mm deep and other deficiencies in concrete or asphalt roadways, however avoid using AQUA PATCH for feathering applications.

The product 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.

RECOMMENDATIONS FOR BAG HANDLING & STORAGE

Shelf life for the bagged product is six months. Keep AQUA PATCH dry, and away from moisture during storage. The durable plastic bags are air tight. Use the product shortly after opening the bag.

RECOMMENDATIONS FOR INSTALLATION

1. Remove all loose material from area to be repaired.
2. Place AQUA PATCH in the area to be repaired. Pothole should be at least 40mm deep.

3. Saturate with liquid and compact.
4. For deep repairs, AQUA PATCH should be placed in 50mm thick lifts. Liquid is to be added between lifts, but only compact once area is filled to grade.

Water/moisture in the repair area is not a problem. In fact, AQUA PATCH is liquid activated, therefore excess water helps accelerate the process. The recommended dosage is as little as 1L of liquid per 15.9 kg (35lb) of AQUA PATCH material. Excess water has no adverse effects on the material and is simply displaced over time.

AQUA PATCH can be used in temperatures well below 0°C, provided the container of AQUA PATCH is not frozen.

For temperature above -10°C, water can be used as the activating liquid. Below -10°C, the activation liquid must not be frozen at the ambient temperature, so brine solutions or non-toxic plumbers anti-freeze can be used in extremely low temperatures.



AQUA PATCH

AQUA PATCH hardens by chemical reaction. If water is used below -10°C, the water and AQUA PATCH may freeze and the chemical reaction interrupted.

Once temperatures rise, the chemical reaction will reactivate and the mixture will harden.

The maximum recommended temperature for application should not exceed 50°C. When tested according to AASHTO T-324-14, AQUA PATCH met typical specifications for rut depth and stripping inflection point when held at 50°C.

INSTALLATION INSTRUCTIONS

Step One: Remove loose debris and clean the area to be patched.

Step Two: Pour AQUA PATCH in the hole.

Step Three: Spread and level. If deeper than 2 inches, apply in two layers.

Step Four: Pour water over AQUA PATCH evenly. Excess water does not damage the material, or undermine the repair.

Step Five: Compact and allow one hour to be traffic-ready.



MATERIAL SPECIFICATION

AQUA PATCH is comprised of crushed aggregates, asphalt binder and proprietary components.

AGGREGATES

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.

ASPHALT BINDER

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

AGGRAGATE GRADATION

Sieve (mm)	Percent Passing (typical)	Specification
19.0	100	100
12.5	98	90-100
9.50	91	
4.75 (#4)	73	
2.36 (#8)	54	28-58
1.18 (#16)	41	
0.60 (#30)	30	
0.30 (#50)	20	
0.15 (#100)	11	
0.075 (#200)	7.8	2.0-10.0



ROADS & RAIL

nilex.com