

AV'15

KONFERENCE
ASFALTOVÉ VOZOVKY 2015

COLD MIX ASPHALT

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Cold Mix – cold applicabel Asphalt mix for quick repair on Asphalt roads

- **Typical Applications:** Pothole repair, temorary trench closing, ramps, manhole repair,....
- **Typical characteristics:** cold applicabel, availabel as bulk material and bag or bucket packaging.
- **Important characteristics:** workability, compactibility, quick curing, durability, environmental friendly.

4 Basic Systems for Cold Mix (CM) depending on the Binder System

- **CM according Slurry Seal System (Microsurfacing)**
- **CM with highly volatile solvents**
- **CM with heavy volatile solvents**
- **CM according the Reactive Asphalt System**

Cold Mix characteristics

- **Type of Binder System**
- **Configuration of the aggregate mixture (single grading or mixture according fuller parabel)**
- **Binder Content (usually between 4 and 8 M-%)**

Cold Mix characteristics

differences are visible at:

- **Workability, storability and ingredient**
 - Flowability at cold temperatures
 - Drain-off characteristic from the aggregate
 - Smell
- **Performance after application**
 - Immediate opening for traffic
 - performance under traffic
 - Durability

Cold Mix testing

Flowability Test at 0°C



Cold Mix testing

Marshall Test at 60 ° C

Solvent based - CM



Cold Mix testing Wheel Tracking Test

Solvent based - CM

Wheel Tracker EN 12697-22

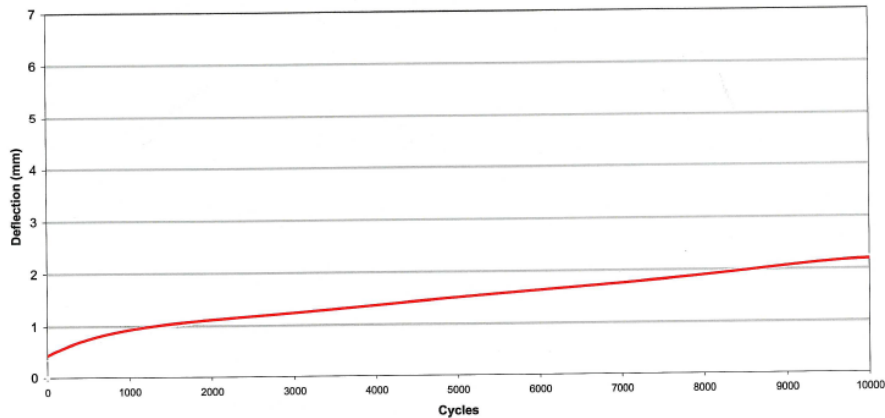
Test Reference : Rephalt 8mm EN 60 Deg 1A

Procedure A Rut Depth : 2.2 mm

Procedure B Rut Depth : 2.2 mm

Procedure A Rut Rate : 0.17 microns per cycle

Procedure B Rut Rate : 0.14 mm/1000 cycles



REACTIV Asphalt -CM

Wheel Tracker EN 12697-22

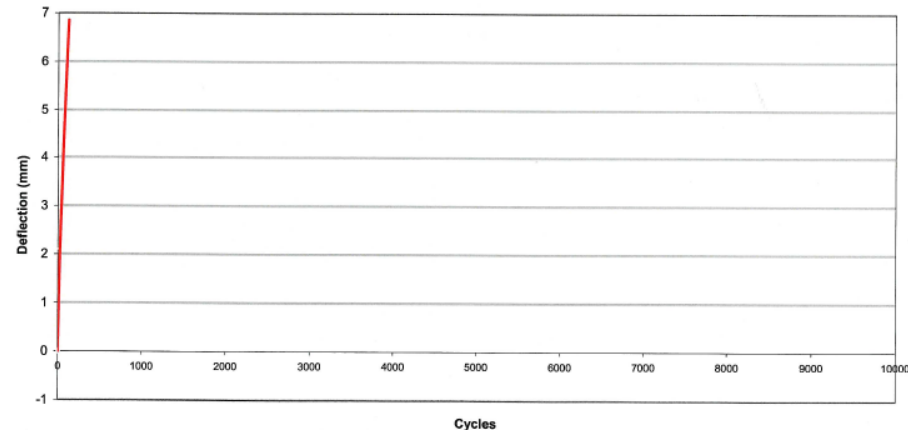
Test Reference : Material B 5 days old BS method 25 Deg

Procedure A Rut Depth : 7.1 mm

Procedure B Rut Depth : 7.3 mm

Procedure A Rut Rate : 19.81 microns per cycle

Procedure B Rut Rate : N/A mm/1000 cycles



Cold Mix characteristics

	Ractiv Binder based products	Solvent based products
Binder Content [M %]	6 – 8	4 – 5
Marshall Stability 60°C [kN]	4 – 6	0 – 1
Marshall Stability 25°C [kN]	> 10	> 3
Void Content [Vol %]	< 10	< 15
Cantabro EN 12697 T.17 [M %]	≤ 10	≥ 30
Solvent Content [M %]	0,0	up to 40

Applicaton examples



Applicaton examples



Applicaton examples





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Thank you for the attention