CHEMORAN

THE CHEMICAL DIVISION OF COLAS

CWM

Product Information

CWM® is Chemoran's flagship warm-mix asphalt additive. By adding it to the binder, mixing temperatures can be reduced by up to 35°C, thereby reducing fuel use at the asphalt plant and significantly reducing carbon emissions.

As CWM consists of a mixture of surface active agents, it also doubles as an adhesion agent, for use with aggregate with a poor binder affinity. When used at conventional mixing temperatures, CWM will act as a compaction aid.

Storage & Handling (refer to Chemoran guide)

CWM must be protected from exposure to water and to long-term exposure to atmospheric moisture. When mixed with water, a chemical reaction can occur which may lead to a reduction in the performance of the additive.

Water may also flash/splash when added to the hot bitumen. Atmospheric moisture contamination takes place slowly on the additive surface exposed to moist air.

When in use, protect from rain and seal tightly when not in use. Do not leave small amounts in containers for long periods before using it. Inspect the storage container and all seals for damage or leaks.

CWM must be protected from frost. Continued cold weather storage can lead to major increase in the viscosity of the CWM. This can lead to difficulties in pumping the additive. Also some precipitation may take place at low temperatures. If this occurs the additive should be heated or agitated thoroughly to insure a homogeneous mixture before use.
The cloud point of CWM is below -5°C. CWM is compatible with Chemoran adhesion agents.

Packing

Drum of 200 kg (441 US lbs) /
IBC / Tote of 940kg (2072 US lbs)

Temp.	Density		Viscosity
°F/°C	(g/cm³)	(lb/gal)	(mPa.s)
50/10	-	-	1470
68/20	0.989	8.254	670
86/30	0.982	8.195	330
104/40	0.976	8.145	175
122/50	0.969	8.087	100

Formulation Example

(refer to CST Technical Note N°154)

Application	Bitumen Type & Dosage	CWM Dosage
BBTM 0/10	5.6% Pmb	0.4% of binder
EME 14	5.4% 10/20	0.4% of binder
AC 14 with 30% RAP	3.1% 35/50	0.4% of total binder content
SP 12.5	5.2% of PG 58-34	0.4% of binder

Once added to the bitumen, CWM will remain active in the stored bitumen for up to three days.

Table of Parameters

Characteristics	Methods	Specification	Typical Values
Physical state at 20°C / 68°F	Visual test	Liquid	-
Alkalinity index (mgHCl/g)	MOPCST PC-006	>120	160
Flash point, closed cup	EN 22719	>200°C / 392°F	220°C / 428°F
Cloud point	CHEM 003	-	< -5°C / 23°F