

EFIMUL

Open-graded cold mixes



Emulsions



Repsol has developed the medium breaking bituminous mix **C67B3 MBA EFIMUL**, formulated ad hoc for the manufacture of open-graded mixes; storable, able to be handled at room temperature and specifically designed to take advantage of the versatility and mobility offered by the machinery for manufacturing and spreading bitumen slurry.

/ APPLICATION AND BEHAVIOUR OF PRODUCT IN THE MIX

There are cases in which, due to the characteristics of the project, the absence of adequate places to install cold-mix plants or problems arising from the difficulty to obtain the relevant administrative and/or industrial permits, it is not possible to use these facilities.

The C67BF3 MBA EFIMUL emulsion allows for the manufacture of open-graded cold mixes using a machine for manufacturing bitumen slurry, providing the following properties:

- Stability compared to the studied aggregate;
- Stability for storage;
- Optimal aggregate/binder adhesive conditions;
- Adequate viscosity for the aggregate used and components of the manufacturing machine;
- Versatility and facility of handling in manufacturing and supply.

This product requires a custom design according to each action (according to the type of aggregate and the location); Repsol offers its clients access to its Technical Support and Development team for the preparation of suitable working formulas.

/ PRODUCT CHARACTERISTICS

The following table shows the characteristics of the C67BF3 MBA EFIMUL emulsion:

UNE EN 13808 DENOMINATION			C67BF3 MBA Efimul
Characteristics	UNE EN	Unit	Tests on original emulsion
Polarity of the particles	1430	-	Positive
Breaking Index (Forshamer filler)	13075-1	-	70-155 Class 3
Binder content (from content in water)	1428	%	65-69 Class 8
Residual binder after distillation	1431	%	≥ 65 Class 8
Content in fluidiser by distillation	1431	%	≤ 10 Class 6
Creep time (4 mm, 40 °C)	12846-1	s	5-70 Class 5
Sieving residue (0.5 mm sieve)	1429	%	≤ 0.1 Class 2
Sedimentation tendency (7d)	12847	%	≤ 5 Class 2
Adhesiveness	13614	%	≥ 90 Class 3
Recovered binder: by evaporation according to EN 13074-1			
Penetration at 15 °C	1426	0.1 mm	140-260 Class 9
Softening Point	1427	°C	< 35 Class 9
Stabilised binder: by evaporation according to EN 13074-1, followed by stabilisation according to EN 13074-2			
Penetration at 25 °C	1426	0.1 mm	≤ 220 Class 5
Softening Point	1427	°C	≥ 39 Class 7

/ ADVANTAGES OF THE USE OF A COMPACT MACHINE + C67BF3 MBA EFIMUL EMULSION

- Versatility as a work unit.
- Efficiency in manufacturing/application system.
- System that allows for taking advantage of available means, without replacing the traditional system.
- Savings in the assembly and disassembly of manufacturing machinery compared to traditional means.
- Eco-efficient system: no emissions and reduced consumption, both in energy and fuel.
- System adapted to the geographical location of the work, the nature of the aggregates, transport possibilities, location in work area, etc.

