

## PRODUCT CHARACTERISTICS

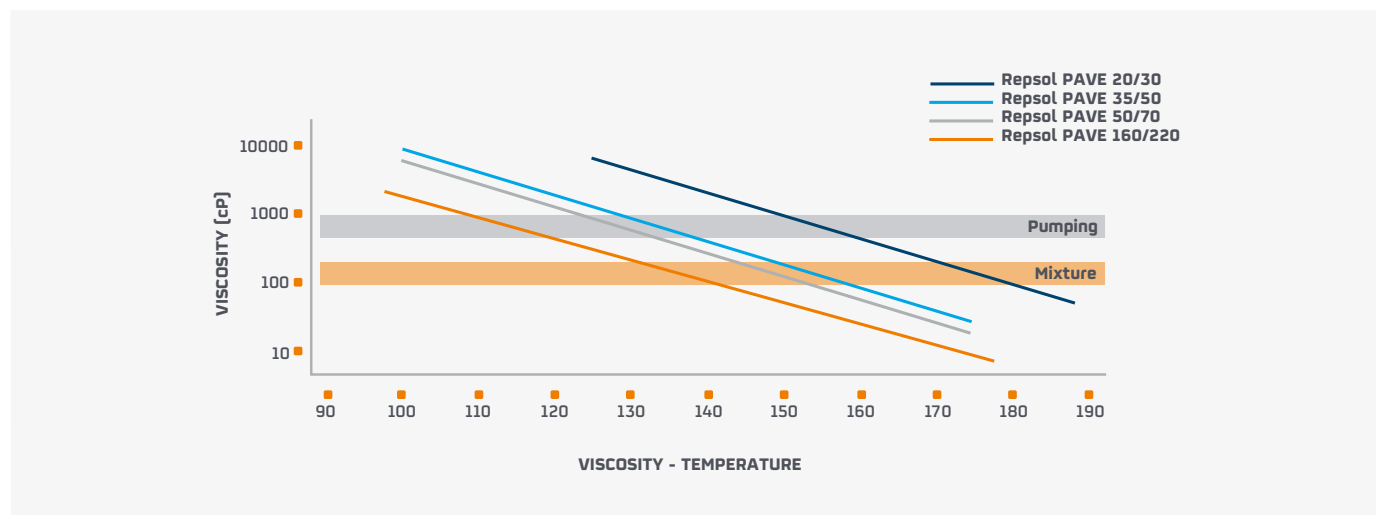
All the asphalt bitumen marketed by Repsol complies with CE Marking requirements according to the EN 12591 standard. The following table shows the characteristics of Repsol PAVE asphalt bitumens for roads sold in Spain:

CHARACTERISTICS		EN STANDARD	UNIT	Repsol PAVE 20/30	Repsol PAVE 35/50	Repsol PAVE 40/60	Repsol PAVE 50/70	Repsol PAVE 70/100	Repsol PAVE 100/150 SOFT	Repsol PAVE 160/220 SOFT
Penetration at 25°C		1426	0,1 mm	20-30	35-50	60-60	50-70	70-100	100-150	160-220
Softening point		1427	°C	55-63	50-58	48-56	46-54	43-51	39-47	35-45
Ageing resistance EN 12607-1	Mass change	12607-1	%	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,8	≤ 0,8	≤ 1,0
	Retained penetration	1426	%	≥ 55	≥ 53	≥ 0,5	≥ 50	≥ 46	≥ 43	≥ 37
	Increased softening point	1427	°C	≤ 8	sev 1: ≤ 8 and sev 2: ≤ 11	≤ 9	sev 1: ≤ 9 and sev 2: ≤ 11	sev 1: ≤ 9 and sev 2: ≤ 11	≤ 12	sev 1: ≤ 11 and sev 2: ≤ 12
Penetration index		12591 Annex A	-	From -1,5 a +0,7	From -1,5 a +0,7	From -1,5 a +0,7	From -1,5 a +0,7	From -1,5 a +0,7	From -1,5 a +0,7	From -1,5 a +0,7
Fraass breaking point		12593	°C	NR	≤ -5	≤ -7	≤ -8	≤ -10	≤ -12	≤ -15
Flash point		ISO 2592	°C	≥ 240	≥ 240	≥ 230	≥ 230	≥ 230	≥ 230	≥ 220
Solubility		12592	%	≥ 99,0	≥ 99,0	≥ 99,0	≥ 99,0	≥ 99,0	≥ 99,0	≥ 99,0

Specifications collected in Article 211 of the Spanish General Technical Specifications for Road and Bridge Works [PG-3].

## RECOMMENDATIONS FOR USE

The most appropriate temperatures for using bitumen are given by viscosity (see figure).



These data are illustrative and not binding, nor subject to specification. These values may change depending on the origin of the product.