

Nominal temperature for bitumen emulsion based on bitumen and soap solution temperature

- : straight run bitumen
 BMP : Polymer modified bitumen
 F : Fluxant

Bitumen rank (European classification)										
160/220	160/220	160/220	50/70F	50/70	50/70	50/70	20/30 et BMPF	20/30 et BMP	20/30 et BMP	20/30 et BMP
70/100F	70/100F	70/100	70/100	70/100						
			35/50F	35/50F	35/50F	35/50	35/50	35/50		

← Fluxing oil →

% of bitumen	°C of soap solution	Temperature of bitumen for 200 cP of viscosity										
		130	135	140	145	150	155	160	165	170	175	180
50	35	67	68	70	72	73	75	77	78	80	82	83
50	40	70	72	73	75	77	78	80	82	83	85	87
50	45	73	75	77	78	80	82	83	85	87	88	90
55	35	71	73	75	77	79	81	82	84	86	88	90
55	40	74	76	78	80	82	84	86	87	89	91	93
55	45	77	79	81	83	85	87	89	91	92	94	96
60	35	76	78	80	82	84	86	89	91	93	95	97
60	40	79	81	83	85	87	89	91	94	96	98	100
60	45	81	84	86	88	90	92	94	96	99	101	103
65	35	81	83	86	88	90	93	95	98	100	102	105
65	40	83	86	88	91	93	95	98	100	103	105	107
65	45	86	88	91	93	96	98	100	103	105	108	110
68	35	84	87	89	92	94	97	99	102	105	107	110
68	40	86	89	92	94	97	99	102	104	107	110	112
68	45	89	91	94	97	99	102	104	107	109	112	115
69	30	83	85	88	91	93	96	98	101	104	106	109
69	35	85	88	90	93	96	98	101	103	106	109	111
69	40	87	90	93	95	98	101	103	106	108	111	114
69	45	90	92	95	98	100	103	106	108	111	113	116
70	35	86	89	92	94	97	100	102	105	108	110	113
70	40	88	91	94	97	99	102	105	107	110	113	115
70	45	91	93	96	99	102	104	107	110	112	115	118
72	35	88	91	94	97	100	103	105	108	111	114	117
72	40	91	93	96	99	102	105	108	110	113	116	119
72	45	93	96	98	101	104	107	110	113	115	118	121
75	35	92	95	98	101	104	107	110	113	116	119	122
75	40	94	97	100	103	106	109	112	115	118	121	124
75	45	96	99	102	105	108	111	114	117	120	123	126

Simplified and complete laboratory	T°C emulsion <94°C : No special precaution to produce in atmospheric condition
Simplified and complete laboratory	94°C ≤ T°C Emulsion < 98°C : Precaution should be taken in simplified laboratory to prevent a local boiling and a deactivation of mill in atmospheric condition. Adding a fluxing oil is a possibility to process highly viscous asphalts in atmospheric conditions.
Complete laboratory	T°C Emulsion ≥ 98°C : You must produce under pressure (complete lab). A fluxing oil could be added to reduce the viscosity of bitumen (thus the temperature) in order to produce in atmospheric condition (simplified lab).