

Polymer 70 – (C70BPF1)

A polymer modified high performance binder designed for surface dressing.

- Suitable for all categories of national, regional and county roads.
- Manufactured to an ISO 9001:2008 Quality Production System & ISO 14001:2004 Environmental Management System.
- Conforms to the NRA Binder Specifications: RC380/2009 Table 3 & IS EN 13808:2005

TECHNICAL INFORMATION

COMPOSITION: 200 pen bitumen, water, bitumen emulsifiers, adhesion agents, block co-polymer and volatile oil.

TEMPERATURE: Application temperature is 80-85°C

STORAGE TEMPERATURE: Protect from frost.

Tank manhole openings must be tightly closed to prevent evaporation. Store at temperatures between 40°C and 70°C.

Before spraying heat to 80 -85°C and circulate.

FIRE: Non Flammable, but will boil and develop steam pressure (>95°C)

Uses

POLYMER 70 has improved tensile, cohesive and adhesive strengths, is less temperature susceptible than non polymer emulsions. It is the ideal binder to use where a significant improvement in properties such as flexibility and temperature susceptibility is required.

Application

POLYMER 70 is supplied in bulk by road tankers and is applied by standard road spraying equipment. Rates of spread will vary depending on site and weather conditions as well as construction practice.

Double Chipping Techniques

POLYMER 70 performs excellently with double chipping techniques such as the 'racked in' and 'double surface dressing' processes. These techniques, linked with Polymer 70 produces a highly stable inter-locked aggregate mosaic which reduces loose chippings in the initial stages and provides a durable life long dressing.

The following table provides recommended target rates of spread for Polymer 70.

Rate of spread of binder and chippings for **BASIC DESIGN** of multiple layer surface dressings

Type	Nominal Sizes mm		Rate of Spread of chippings		Rate of Spread of Binder	
	1st Layer	2nd Layer	1st Layer l/m ²	2nd Layer l/m ²	1st Layer l/m ²	2nd Layer l/m ²
Racked-In*	14/20	6/10	10 - 12.5	5 - 7	2.4	-
	10/14	2/6	8 - 10.5	3.5 - 4.5	1.9	-
	6/10	2/6	5 - 7	3 - 4	1.6	-
Double	14/20	6/10	10.5 - 13	6 - 8.5	1.3	1.4
	10/14	2/6	8.5 - 11	4 - 5.5	1.1	1.2
	6/10	2/6	5.5 - 7.5	4 - 5	0.9	1.0

Recommended spraying rates are as per the IAT Guidelines for Surface Dressing in Ireland 2nd Edition February 2007. * For racked in surface dressings, the rates of spread of chippings and binder are intended to permanently hold a significant proportion of the smaller chippings.

When surface dressing on very hard, very soft, difficult or critical roads / sites, please contact our technical staff for further advice on **(091) 794650**

Properties of Cationic Bitumen Emulsion: C70BPF1 Polymer 70

Property	Test Method	Unit	NRA Binder Specification 2011	Typical Value
Perceptible Properties	IS EN 1425	None	TBR (Class 1)	Pass
Particle Polarity	IS EN 1430	None	Positive (Class 2)	Positive
Breaking Value	IS EN 13075-1	None	*TBR (Class 1)	95
Residue on Sieving 500µm sieve (percent by mass)	IS EN 1429	% by mass	≤ 0.2 (Class 3)	0.1
Binder Content ^b (by water content)	IS EN1428	% by mass	≥ 70 (Class 9)	73.5
Recovered Binder Content ^c (by distillation)	IS EN 1431	% by mass	≥ 70 (Class 9)	73.5
Oil Distillate Content	IS EN 1431	% by mass	≤ 3 (Class 3)	1.0
Viscosity, Redwood No 11 @ 85°C	BS 434	Second	25-60	40