Aquagrip 80P (KE96)

Premium Grade
Polymer Modified Surface Dressing Emulsion

Ayton PRODUCTS

General

Aquagrip 80P is a Premium Grade polymer modified cationic bitumen emulsion which complies with grade C69BP3 of BS EN 13808. It has been designed to meet the requirement for an enhanced performance surface dressing emulsion in situations where conventional K1-70 bitumen emulsion will not perform satisfactorily.

Aquagrip 80P is manufactured by Ayton Products within Management Systems accredited to

BS EN ISO 9001:2000, BS EN ISO 14001:1996 and OHSAS 18001:1999.

Properties

Aquagrip 80P achieves Premium Grade classification in discriminatory tests as defined by Specification for Highway Works Clauses 919 and 922.

Surface dressing design

The design and implementation of surface dressing using Aquagrip 80P should be carried out in accordance with Road Note 39, Design Guide for Surface Dressing, Design Manual for Roads and Bridges Volume 7 Section 5 Part 2: HD 37/99 and Sector Scheme Document 13A.

Aquagrip 80P is usually applied at road surface temperatures between 12 °C – 35 °C, in dry conditions, normally between May and August, depending on dressing design.

Health & Safety

Aquagrip 80P is not classified as hazardous to health or the environment. For further information refer to our relevant Material Safety Data Sheet or contact our Safety, Health and Environment Department.

Supply

Availability, prices and conditions of sale are available from our Bitumen Products Sales Department.

Technical Service

Further technical information and advice is available from our Technical Department.

Emulsion Specification to BS EN 13808			Emulsion As Supplied
Binder Content		BS EN 1428	67 – 71 %
Efflux Time (4mm at 40 °C)		BS EN 12846	10 – 45 s
Breaking Value		BS EN 13075-1	50 - 100
Adhesivity		BS EN 13614	> 75 %
Typical Binder Properties		After recovery to BS EN 13074	After aging to prEN 14769
Penetration 25 °C / 100 g / 5 s	BS EN 1426	146 dmm	60 dmm
Penetration 5 °C / 200 g / 60 s	BS EN 1426	110 dmm	52 dmm
Softening Point	BS EN 1426	50 °C	52 °C
Typical Binder Rheology to prEN 14770 (SHW Clause 928)		After recovery to BS EN 13074	After aging to prEN 14769
High Equi-stiffness Temperature	T_{2kPa}	51 °C	64 °C
Low Equi-stiffness Temperature	T_{2MPa}	-12 °C	7 °C
Complex Stiffness Modulus at 5 °C	$G^*_{(5\ °C)}$	6.16 x 10^5 Pa	2.26 x 10^6 Pa
Complex Stiffness Modulus at 25 °C	$G^*_{(pen)}$	7.08 x 10^4 Pa	3.59 x 10^5 Pa
Complex Stiffness Modulus at 60 °C	$G^*_{(60\ °C)}$	1.07 x 10^3 Pa	3.17 x 10^3 Pa
Phase Angle at 5 °C	$\delta_{(low)}$	63.1 °	54.9 °
Phase Angle at 60 °C	$\delta_{(high)}$	72.1 °	79.8 °
Typical Binder Cohesion to BS EN 13588 (SHW Clause 939)		After recovery to BS EN 13074	After aging to prEN 14769
Maximum Cohesion	C_M	1.50 J cm^{-2}	1.50 J cm^{-2}
Temperature of Maximum Cohesion	T_M	33 °C	35 °C
Temperature Range for Cohesion Value > 0.5 Jcm^{-2}	-	40 °C	30 °C

MSDS details to come