

Lucobit 1210A

Polyethylene Copolymer

Lucobit AG

Message:

Lucobit 1210 A is a mixture of ethylene copolymers and special bitumen. The resulting formulation is a concentrate or "masterbatch".

Lucobit 1210A consists of thermoplastic polyolefins. Addition of Lucobit to bitumen increases its viscosity and broadens the range of plasticity. Although the minimum value of the Fraass breaking point of Lucobit is as low as for unmodified standard bitumen, the ring and ball softening point increases considerably, depending on the proportion of Lucobit that was added. Penetration values decline accordingly. Ductility determined according to DIN EN 12591 decreases, however, the values ascertained for the so-called ductility at low temperatures are usually more favourable than those for standard bitumen without addition of Lucobit.

Compared with other standard binder Lucobit 1210A displays significant advantages in improving resistance to deformation. Rut formation tests at high temperatures demonstrated that asphalt can bear a two- to three-fold load when modifying it with thermoplastics or altering binder viscosity by adding Lucobit. This does not impair the low-temperature performance of Lucobit 1210A, but rather improves it.

Applications

Even relatively small amounts of Lucobit 1210A in asphalt mixtures improve:

resistance to mechanical stress, in particular deformation and wear

stability / rigidity and reduce the tendency to flow when hot and under load

low temperature flexibility

ageing behaviour

Examples for application:

s-wearing courses to ZTV-Asphalt - StB

poured asphalt, also on sloping surfaces (ramps)

stone mastic asphalt

special asphalt surfaces, e.g. porous asphalt

thin bituminous wearing courses (hot laying)

General Information		
Features	Chlorine Free	
	Copolymer	
	Environmentally Sound	
	Good Dimensional Stability	
	Good Heat Aging Resistance	
	Good Stability	
	High Rigidity	
	Low Temperature Flexibility	
Uses	Asphalt Modification	
	Masterbatch	
Appearance	Black	
Forms	Granules	
Physical	Nominal Value	Unit
Density		
-- ¹	1.00 to 1.10	g/cm ³
--	0.970	g/cm ³
Apparent Density	0.50	g/cm ³
Mechanical	Nominal Value	Unit

Tensile Modulus	17.0	MPa
Tensile Strain (Break, 23°C)	700 to 800	%
Additional Information	Nominal Value	Unit
Ductility ²	> 150	mm
Embrittlement Range	< -30	°C
FraaB Breaking Point ³	< -10	°C
Penetration Depth ⁴	2.50 to 5.50	cm
Softening Range		
-- ⁵	> 55	°C
--	80 to 100	°C
NOTE		

- | | |
|----|--|
| 1. | Mixture of Bitumen B50/70 and 5%
Lucobit® 1210A |
| 2. | Mixture of Bitumen B50/70 and 5%
Lucobit® 1210A |
| 3. | Mixture of Bitumen B50/70 and 5%
Lucobit® 1210A |
| 4. | Mixture of Bitumen B50/70 and 5%
Lucobit® 1210A |
| 5. | Mixture of Bitumen B50/70 and 5%
Lucobit® 1210A |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

