



ROAD BUILDING BITUMINOUS EMULSIONS

GENERAL DESCRIPTION

ESHA bituminous emulsions consist of small bitumen droplets, 1-10 microns, dispensed in an aqueous continuous phase.

Bituminous emulsions are used in the road building sector, as well as in the Runways' construction. Curing procedure starts as soon as they are applied on either the road surface or the aggregates and finally the remaining bitumen acts as binder.

Curing speed, depends on several factors, such as:

- Emulsion type
- Aggregate nature
- Gradation of the aggregates
- Weather conditions & aggregates moisture



AVAILABLE EMULSIONS' TYPES

According to **GR-PTP A-202**, **GR-PTP A-203** and **EN 13808** following types of road building bituminous emulsions are available:

KE-1: Rapid setting Cationic bitumen emulsion of low viscosity, with 53-60% bitumen content, suitable for tack coats.

KE-2: Rapid setting Cationic bitumen emulsion of higher viscosity, with 58-65% bitumen content, suitable for sealing coats and aggregate coating.

KE-5: Medium setting Cationic bitumen emulsion of low viscosity, with 40-45% bitumen content, suitable for impregnation of road bases.

AE-5: Slow setting Anionic bitumen emulsion of higher viscosity, with 57-65% bitumen content, suitable for sealing coats and aggregate coating.

ESHA-IZOTON PRIMER: Special Rapid setting Cationic bitumen emulsion of low viscosity, with 55-60% bitumen content, suitable for tack coat of bridge Deck waterproofing system.

ESHABIT JP: Rapid setting cationic bituminous emulsion with 64% binder content, specially designed for use in combination with aggregates at patch-work spraying machines (Jet Patchers), or for hand-mixing patch work.

ESHACOAT-PME-S-C60BP5: Medium setting elastomeric cationic bituminous emulsion with 60% min pmb binder content. It is suitable for slurry sealing, microsurfacing, or special tack coating, where ultimate inter layer elastic adhesion is of high importance and best aggregates and reinforcing meshes anchoring is necessary.

PACKING

ESHA bituminous emulsions can be delivered:

- 210 kg metallic barrels
- 1.000 kg plastic containers
- 24.000 kg full truck container

USEFUL INFORMATION

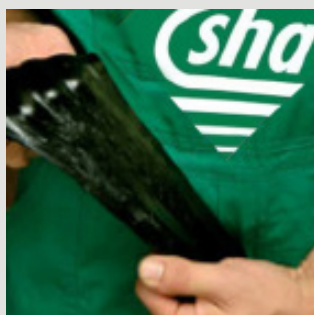
All **ESHA** bituminous emulsions are delivered ready for use. No dilution needed.



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TECHNICAL CHARACTERISTICS

Tests	KE - 1	KE - 2	KE - 5	AE - 5	ESHACOAT PME-S	ESHA-IZOTON PRIMER	ESHABIT JP
1. Test on Emulsions							
TYPE EN-13808	C55B5	C60B4	C42BF6	-	C60BP5	C55B5	C64B4
Furol viscosity at 25°C	20 - 100 sec	-	20 - 100 sec	20 - 100 sec	-	20 -100 sec	--
Furol viscosity at 50°C	-	75 - 400 sec	-	-	75 - 400 sec	-	75 - 400 sec
Residue after distillation	≥ 53 %	≥ 58 %	≥ 40 %	≥ 57 %	≥ 60 %	≥ 53 %	≥ 64 %
pH	2 - 7	2 - 7	2 - 7	7 - 14	2 - 7	2 - 7	2 - 7
Breaking Value (EN 13075)	120 - 180	70 - 130	170 -230	-	120 - 180	120 - 180	70 - 130
2. Test on Residue							
Penetration of Residue (EN 1426)	≤ 220 dmm	≤ 220 dmm	≤ 100 dmm	100-200 dmm	≤ 100 dmm	≤ 220 dmm	≤ 330 dmm
Softening Point of Residue (EN 1427)	≥ 43 °C	≥ 39 °C	≥ 55 °C	≥ 43 °C	≥ 55 °C	≥ 43 °C	≥ 35 °C
Solubility in CCl4	≥ 97,5 %	≥ 97,5 %	≥ 97,5 %	≥ 97,5 %	≥ 97,5 %	≥ 97,5 %	≥ 97,5 %
Ash content	≤ 2 %	≤ 2 %	≤ 2 %	≤ 2 %	≤ 2 %	≤ 2 %	≤ 2 %
Ductility % at 25 °C	≥ 40 cm	≥ 40 cm	≥ 40 cm	≥ 40 cm	≥ 40 cm	≥ 40 cm	≥ 40 cm
Elastic Recovery at 25 °C (EN 13398)	≤ 30 %	≤ 30 %	≤ 30 %	≤ 30 %	≥ 55 %	≤ 30 %	≤ 30 %



"ESHACOAT PME -S"

Tolerances in the nominal values are in accordance with respective standards. Producer reserves the right to modify the properties of his products.

The information contained in this leaflet is, to the best of our knowledge, true and reliable and is supported by the present state of our knowledge. According to the care taken and the method of application, upon which we have no influence, the values are subject to divergence. Therefore for best results, prior to use, an application test should be made by the user under his own processing conditions.

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EN ISO 9001:2015 EN ISO 14001:2015