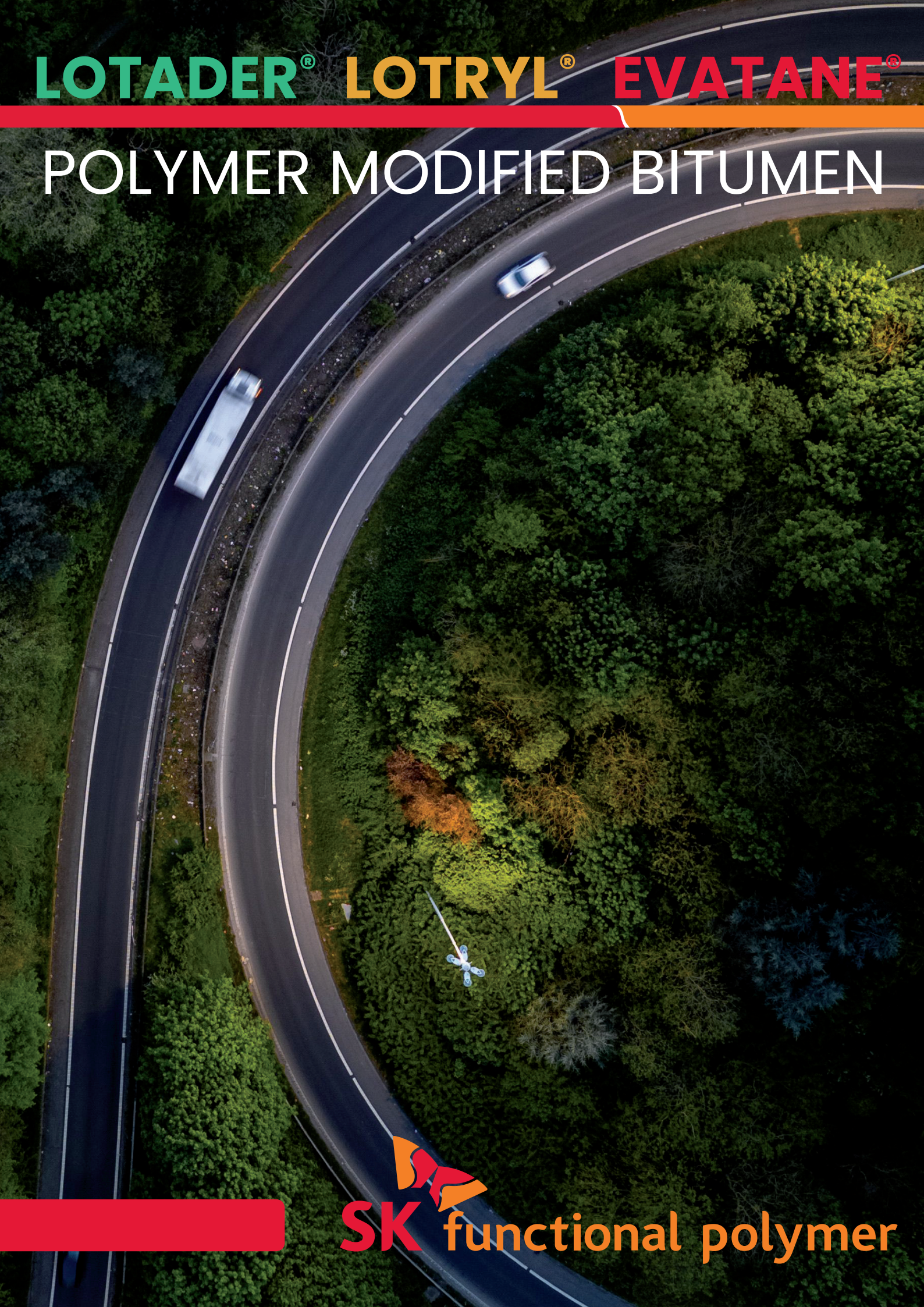
LOTADER® LOTRYL® EVATANE®

POLYMER MODIFIED BITUMEN



SK functional polymer

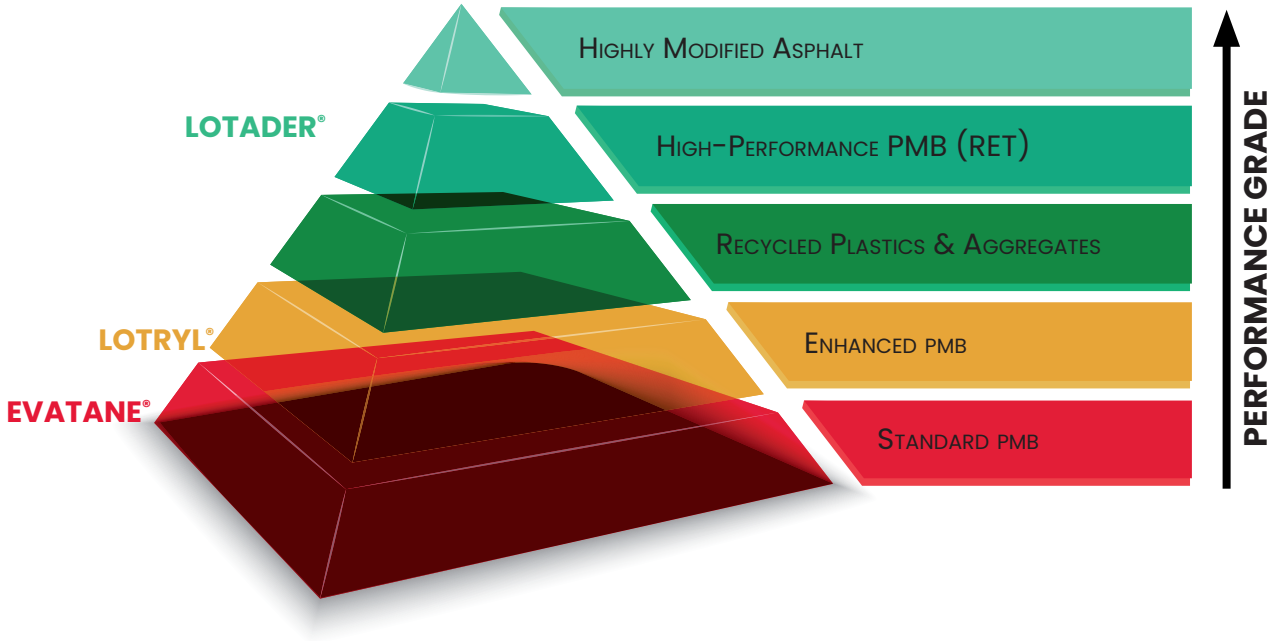
LOTADER® LOTRYL® EVATANE®

SK functional polymer

From 36 million km of roads in 2016 to an expected 60 million km of roads in 2050, the scale of global infrastructure is accelerating rapidity.

SK functional polymer combines polymer innovation, laboratory expertise, and field experience to deliver a complete range of bitumen modification technologies.

FIVE-LEVEL APPROACH TO BITUMEN PERFORMANCE





STANDARD PMB

- Proven technology for decades
- Improved rutting resistance
- Balanced stiffness & flexibility
- Excellent bitumen compatibility
- Enhanced kerosene resistance

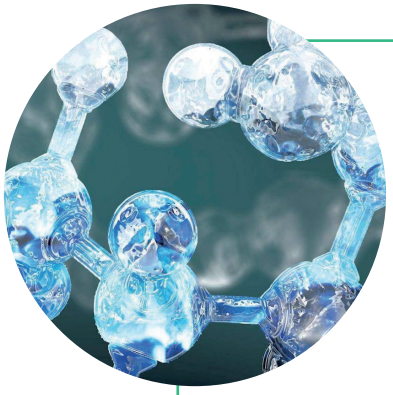
SKFP SOLUTIONS
EVATANE® 20-20
EVATANE® 24-03



ENHANCED PMB

- Enhanced processability in bitumen
- High rutting & aging resistance
- Improved flexibility and elasticity
- Decrease cracking at low temperature
- Good resistance to kerosene
- Suitable for pigmented asphalts & synthetic binders

SKFP SOLUTIONS
LOTRYL® 24MA07T
LOTRYL® 28BA175T



HIGH-PERFORMANCE REACTIVE PMB (RET)

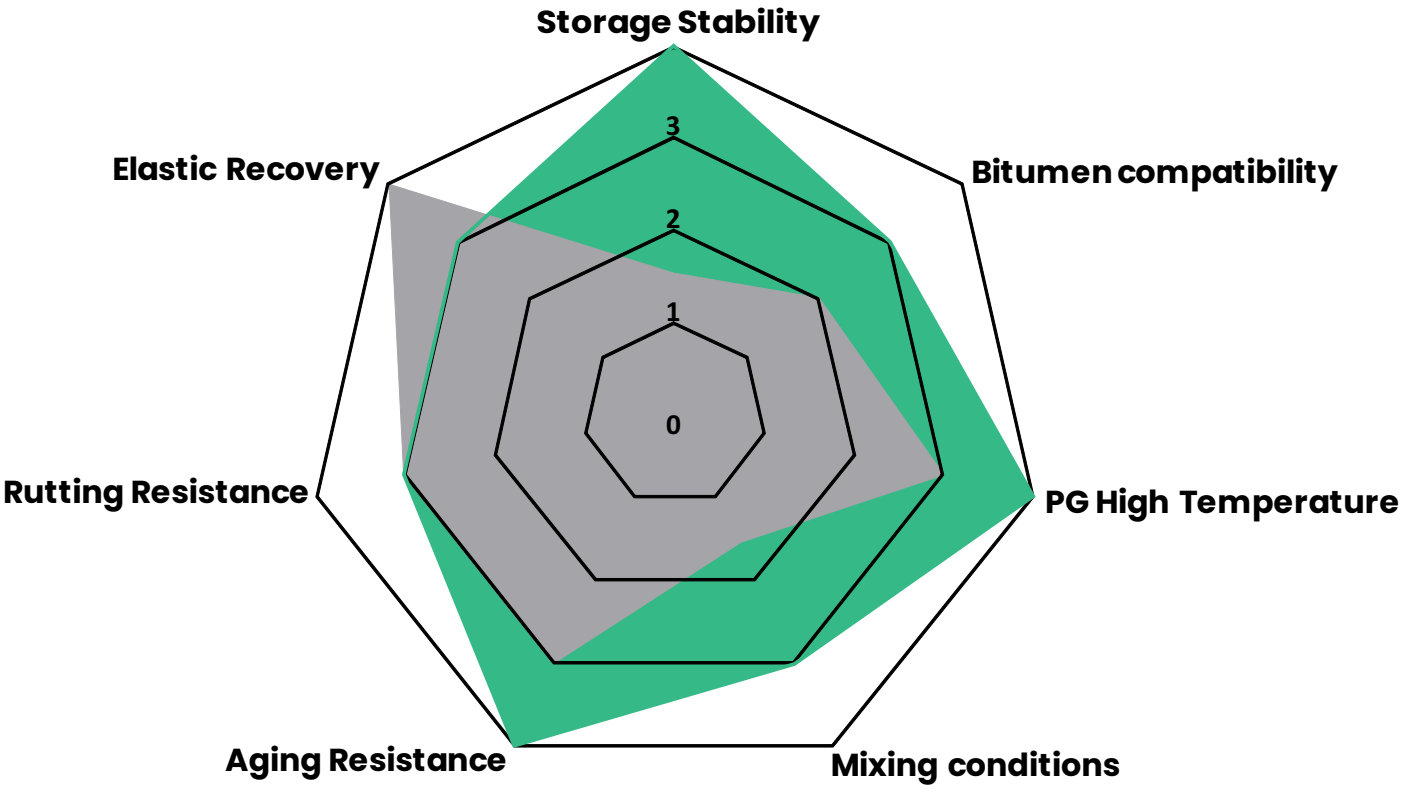
LOTADER® reactive elastomers introduce a new level of performance in PMB.
This technology creates chemical interactions between the polymer and polar components of bitumen.
The result is a more stable internal structure with superior durability and long-term performance.

STRONG ADVANTAGES:

- High efficiency at low dosage
- Easy processing with standard equipment
- High storage & mixing stability
- Catalyst-free processing possible
- Broad bitumen compatibility

SKFP SOLUTIONS
LOTADER® AX8700
LOTADER® AX8900
LOTADER® AX8750T
LOTADER® AX8670T

	Dosage (wt%)	Mixing Conditions	Mixing temperature (°C)	Mixing Time with catalyst
LOTADER®	1.2 - 2.4	Low-Shear Mixer Only	180 - 190	Approx. 6h
SBS	3.0 - 6.0	High-Shear Mixer Required	180 - 190	Approx. 10-12h





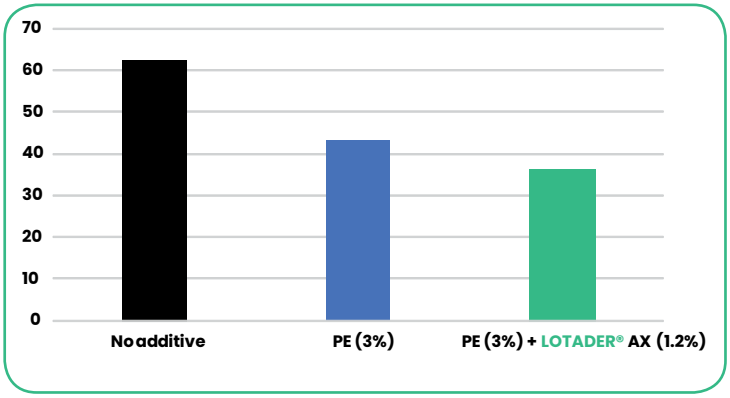
RECYCLED PLASTIC & AGGREGATES IN BITUMEN

SK functional polymer solutions help mix recycled polyethylene (rPE) and recycled aggregates into bitumen, improving its performance while supporting the reuse of plastic waste in more sustainable asphalt.

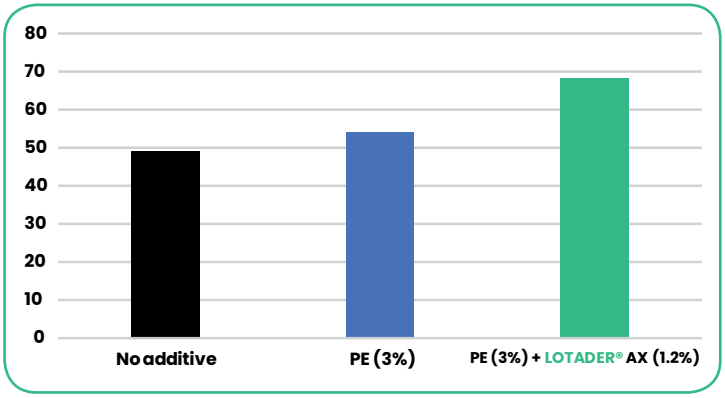
Finetune properties with **LOTADER®** AX/ rPE ratio:

- Penetration
- Softening Point
- Brookfield Viscosity
- Elastic Recovery
- Storage stability

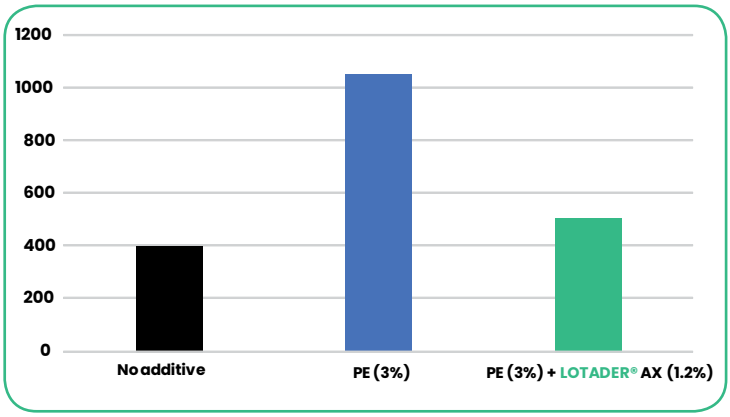
Penetration 25°C (0.1 mm)



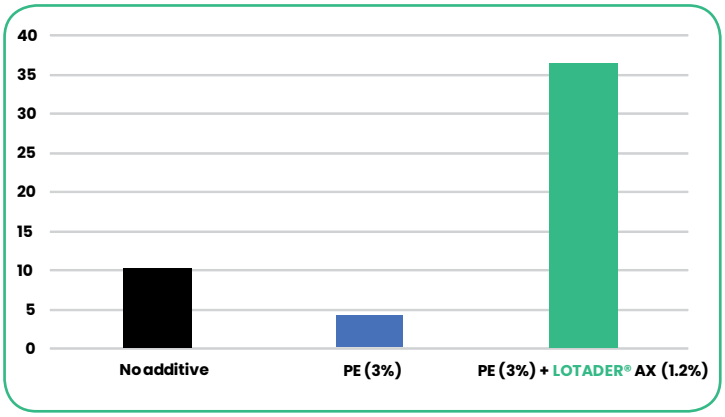
Softening Point (°C)



Brookfield Viscosity at 135° C (cP)



Elastic recovery by Torsion (%)



LOTADER® AX allows high PE loading into asphalt.

→ Improve Performance Grade while using recycling PE

Study conducted by AZELIS COLOMBIA S.A.S. unsing a 60/70 penetration-grade asphalt.
We gratefully acknowledge their collaboration.

DIFFERENT GRADES FOR DIFFERENT APPLICATIONS

Explore our product range and technical specifications. Contact us for the full range of available grades.

LOTADER®

Reactive elastomeric terpolymers deliver outstanding performance in polymer-modified bitumen

Grade	GMA (wt%)	Comonomer (wt%)	Melt index (g/10 min) (190°C-2.16 kg)	Melting Point (°C)
AX8850	12	-	40	98
AX8670T	9	VA (16)	12	87
AX8840	8	-	5	104
AX8700	8	BA (25)	9	72
AX8900T	8	MA (24)	6	91
AX8900	8	MA (24)	6	65
AX8750T	5	BA (27)	15	93
AX8750	5	BA (25)	12	72
AX8930	3	MA (25)	7	67

LOTRYL®

Ethylene-acrylate copolymers (EMA, EBA) represent the second generation of non-reactive bitumen modifiers

Grade	Comonomer (%)	Melt index (g/10 min) (190°C-2.16 kg)	Melting Point (°C)	Vicat softening temp. (°C)
24MA02T	MA (24)	2	95	40
24MA07T	MA (24)	7	97	< 40
29MA03T	MA (29)	3	92	< 40
28BA175T	BA (28)	175	102	< 40
35BA40T	BA (35)	40	89	< 40

EVATANE®

Ethylene Vinyl Acetate (EVA) is a well-established polymer technology for bitumen modification

Grade	VA content (wt%)	Melt index (g/10 min) (190°C-2.16 kg)	Melting Point (°C)	Vicat softening temp. (°C)	Ring and ball temp. (°C)
18-150	18	150	88	43	102
20-20	20	20	83	46	127
24-03	24	03	80	46	183

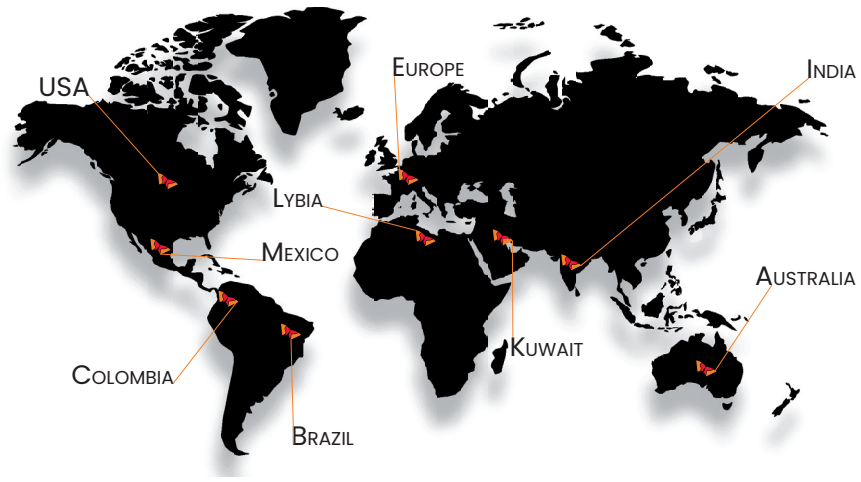
LOTADER® LOTRYL® EVATANE®

THE INNOVATIVE CHEMICAL COMPANY

SK Functional Polymer operates a laboratory focused on polymer-modified bitumen research and performance evaluation.

This technical capability enables to develop optimized formulations, validate performance, and support customers with high-level application expertise.

SK functional polymer has contributed for several decades to road infrastructure projects across all continents.



Our polymer solutions are trusted in diverse climates and demanding environments, supporting durable pavements from major highways to urban networks worldwide.

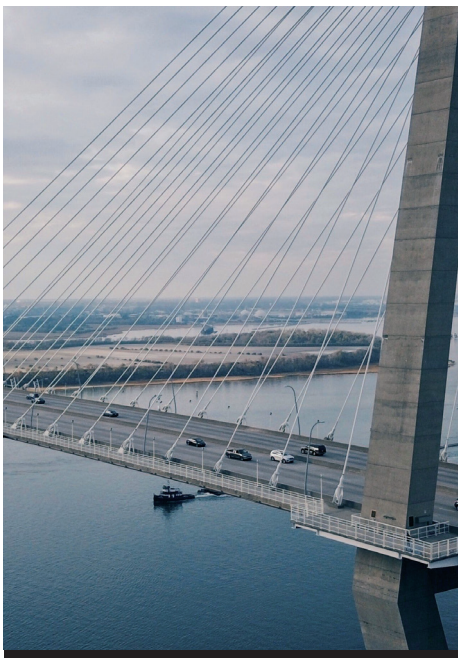
This global experience reflects our long-term commitment to quality, innovation and reliable performance. SKFP products are made in Europe.



ROUNDABOUTS



AIRPORTS



BRIDGES

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