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# LUCOLAST<sup>®</sup> 7010

THE ADDITIVE TO POLYMER MODIFICATION

OF BITUMEN

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... make better roads

# LUCOLAST® 7010 MODIFIED BITUMEN – THE RIGHT CHOICE FOR YOUR ASPHALT



## THE PRODUCT

Lucolast® 7010 is a polar copolymer consisting of ethylene and butyl acrylate with low crystallinity.

Addition of Lucolast 7010 to bitumen increases its viscosity and broadens the range of plasticity. Although the minimum value of the Fraass breaking point of Lucolast 7010 is as low as for unmodified standard bitumen, the ring and ball softening point increases considerably, depending on the proportion of Lucolast 7010 that was added.

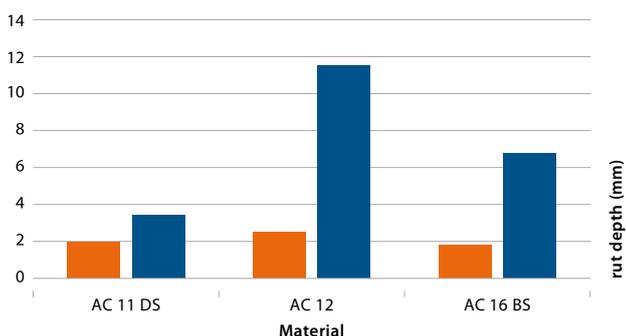
## THE APPLICATIONS

- 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)

## TECHNICAL DATA

Below figures show the positive effects of dosing Lucolast 7010 to various asphalt cements and to bitumen 50/70.

Figure 1: Decrease of rut depth with dosing Lucolast 7010 > less rutting



## PROCESSING INTO PMB

Bitumen is mixed homogeneously with Lucolast 7010 at the temperature range of 165 °C to 195 °C and is then ready for use. Depending on mixing intensity, the time required to mix large quantities (approx. 20 t) is 1 - 3 h. The usage of a high- speed shear mixing unit leads to a higher quantity of mixture. In order to avoid a possible phase separation a continuous mixing process is required.

## THE ADVANTAGES

- Raised binder softening point
- Decreased binder penetration
- Resistance to mechanical stress, in particular deformation and wear
- Improved low temperature flexibility
- Excellent ageing behaviour

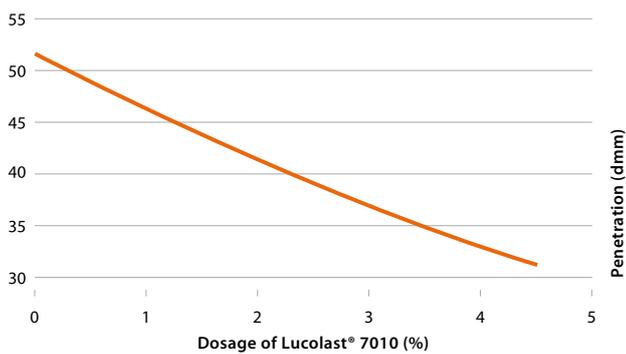
Rutting test of various non modified and Lucolast® 7010 modified asphalt concrete (AC) types according to TP-A FGSV at 60 °C in an air basin with a rubber wheel after 20.000 load cycles

● modified with Lucobit® 1210A    ● non modified

# LUCOLAST® 7010 IS THE FAVORITE MODIFIER FOR THE ASPHALT INDUSTRY. IT IS IN USE FOR MANY YEARS IN NUMEROUS COUNTRIES ALL OVER THE WORLD.

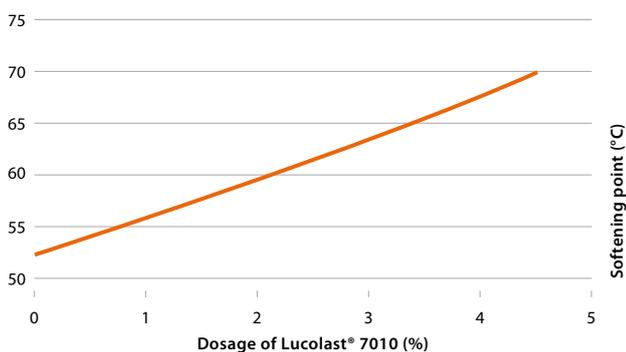


Figure 2: Decrease of needle penetration with dosing Lucolast 7010 > less rutting



Penetration of unmodified and Lucolast® 7010 modified bitumen 50/70 as a function of dosage of Lucolast® 7010 according to DIN EN 1426

Figure 3: Increase of softening point with dosing Lucolast 7010 > less rutting



Softening point of unmodified and Lucolast® 7010 modified bitumen 50/70 as a function of dosage of Lucolast® 7010 according to DIN EN 1427



## LOCATIONS

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