NEUBURG SILICEOUS EARTH IN YELLOW THERMOPLASTIC ROAD MARKING PAINTS

OBJECTIVE

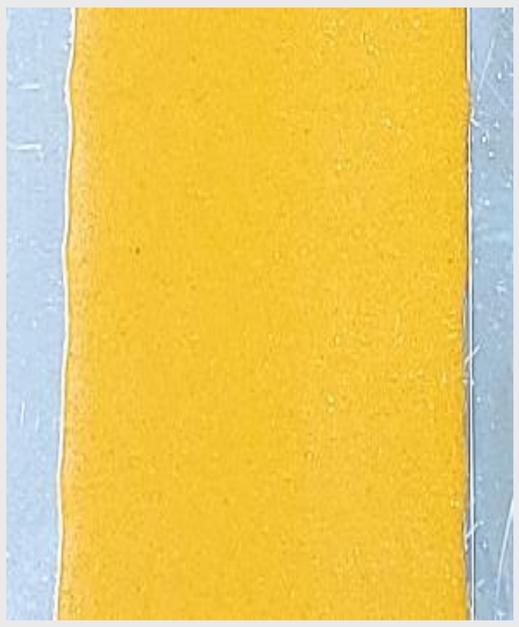
Cost saving through substituting the yellow pigment by TP 2023032

FORMULATION

Typical HOT MELT ROAD MARKING yellow formulation with C5 resin, plasticizer, PE wax and calcium carbonate

	Control	**Neuburg Siliceous Earth (NSE)**
Pigment yellow	100 %	70 %
TP 2023032*	-	**30 %**

The exchange ratio is 1:1 by weight. Due to a higher oil number and a lower density of TP 2023032 compared to the pigment, the extension will lead to a slightly higher viscosity. In many cases producers tend to increase the melting temperature to achieve better flow properties after extension. However, higher temperature will lead to resin degradation and therefore yellowing of the product. To overcome flow issues it is recommended to slightly increase the plasticizer and/or wax concentration. The melt temperature, however, must not be increased.



RESULTS AND SUMMARY

Substituting 30 % pigment with TP 2023032 in yellow hot melt road marking paints leads to a clear cost reduction. Additionally a tendency towards better adhesion of the glass beads and an improved abrasion resistance can be expected .

*The tests were carried out with Sillitin N 82. This product is no longer available. Recommended: TP 2023032.