



KRONOMatt

KRONOS - your first choice for a brighter and more colourful life

From our earliest beginnings to modern times, KRONOS continues to lead the industry in both process innovation and product quality. The continuous improvement of production processes, intensive research and development, and constant dialogue and cooperation with our customers and raw material suppliers are the guarantees for sharing success in the future.



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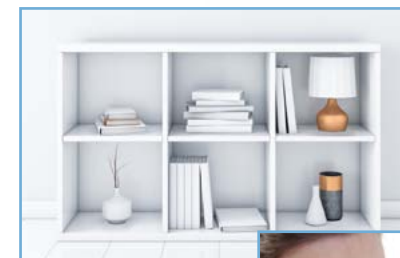
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KRONOS®

KRONOMatt

Paint different
Formulate the future



***Discover the new deep matte effect
with the world's first
matte titanium dioxide!***

KRONOMatt is a matte titanium dioxide for coatings below cPVC. It offers numerous key features that all result in a lean, easy and highly efficient manufacturing process. By using **KRONOMatt** a matting agent is no longer required to formulate your product.

With **KRONOMatt** you profit from various advantages:

- ◆ Increased freedom of formulation without changing PVC and viscosity
- ◆ Turn semi-gloss formulations in flat formulations without increasing solid content
- ◆ On coated surfaces: excellent stain resistance, scrub resistance
- ◆ Reduction of process steps

Key Attributes

- ★ Significantly reduces gloss in binder rich coatings
- ★ Improves stain resistance
- ★ Low BET and oil absorption
- ★ Is used without changing PVC and viscosity
- ★ Imparts outstanding weather resistance to coatings
- ★ Shows maximum brightness and a neutral tone in white coatings
- ★ Produces brilliant, clean tints in coloured applications
- ★ Is readily wetted and dispersed

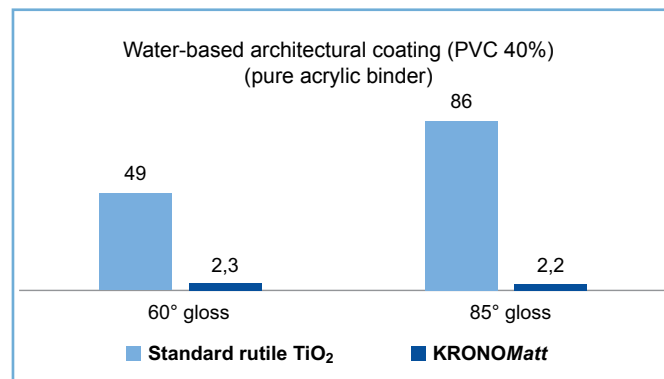


Fig. 1:
Semi-Gloss formulation (PVC 40%) based on standard rutile TiO₂ and KRONOMatt without any additional filler. KRONOMatt reduces the 60° and 85° gloss significantly. The semi-gloss formulation is turned into a flat formulation without changing the PVC.

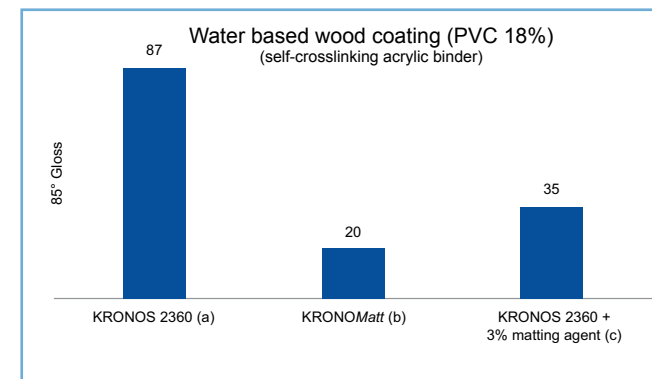


Fig. 3:
a) High gloss formulation based on KRONOS 2360
b) KRONOMatt: dispersant amount adjusted, whole amount of KRONOS 2360 replaced by KRONOMatt. Constant PVC - no additional fillers or matting agents added.
c) Low gloss reference: KRONOS 2360 + 3% of a conventional matting agent

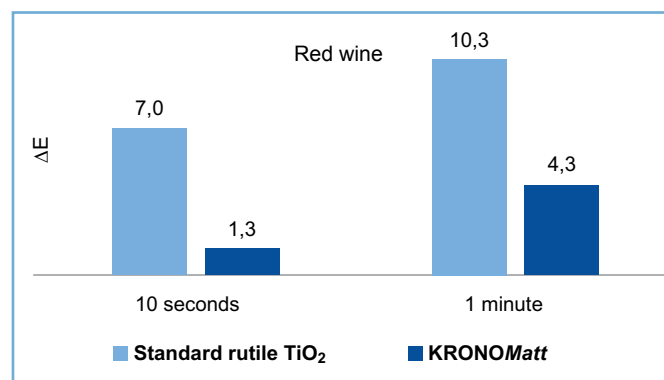


Fig. 2:
Results of the stain resistance test after 10 seconds to 1 minute treatment time of red wine indicating direct removal (the lower the values the better). ΔE values show that the flat coating with KRONOMatt performs better than the semi-gloss version with standard rutile TiO₂.

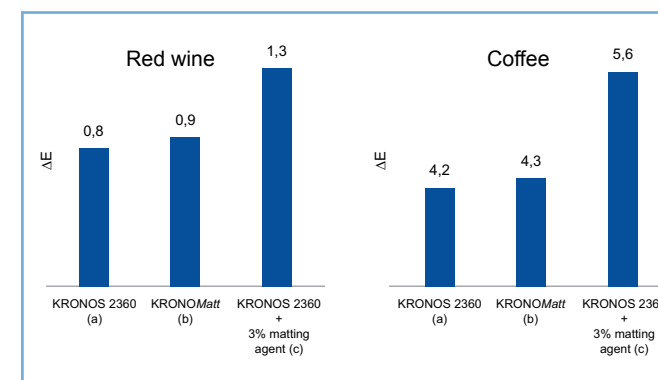


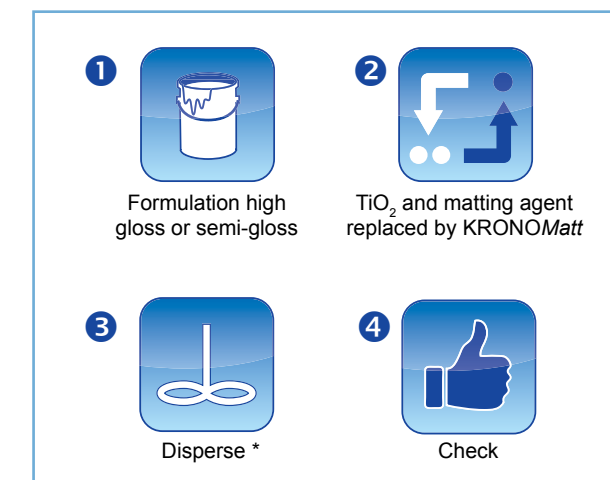
Fig. 4:
Results of stain resistance test after 16h treatment time with red wine or coffee (the lower the values the better). ΔE values show: low gloss formula based on KRONOMatt b) performs like the high gloss formula based on KRONOS 2360 a).

KRONOMatt Applications

Binder rich high-quality coatings, e.g.:

- ◆ Matte and semi-gloss wood coatings (furniture)
- ◆ Highly weather resistant industrial coatings
- ◆ Interior and exterior architectural coatings

How does KRONOMatt work?



* Low shear dispersion necessary, depending on coatings formulation

Optimize performance:

- ◆ Adjustment of dispersion process
- ◆ Mixing with standard KRONOS pigments (e.g. KRONOS 2360)
- ◆ Adjust dispersant amount