



NeoRad™ R-700

Deep-matte finishes without compromise

NeoRad™ R-700: Water-based UV dispersion for excimer curing



Create wooden furniture coatings with a matte appearance and silky feel, without sacrificing performance

NeoRad™ R-700 delivers what most conventional matting technologies can't: a luxurious deep-matte finish without sacrificing performance. This innovative water-based UV dispersion works with excimer-curing technology to create microscopic surface textures that scatter light uniformly. This enables a sought-after natural matte look without the need for matting particles.

Where innovation meets elegance, naturally

Unlike traditional methods that rely on silica or waxes to create matte surfaces, NeoRad™ R-700 uses advanced excimer technology to generate uniform micro-wrinkles across the coating surface. The result? A consistently deep-matte appearance with a silky-smooth feel yet high resistance to scratches and stains.

Performance highlights:

- **Premium deep-matte finish:** achieve very low gloss levels without matting agents, even in thin films
- **Excellent resistance** to chemicals and scratches
- **Luxurious, silky-smooth feel** without rough particles
- **Transparent finish** with no reduction in clarity, unlike particle-based matting
- **More sustainable:** waterborne solution with low VOC content
- **Easy to formulate** without the need for matting agents
- **High productivity** thanks to fast water release and UV curing

Great for premium wooden furniture

Consumer preference is shifting toward natural-looking wood finishes. NeoRad™ R-700 delivers what the market demands: deep-matte surfaces with uncompromised performance and a premium feel that elevates wooden furniture to new heights of sophistication.



SEM picture from cured film



Comparison of a WB UV excimer cured wood coating (left) versus a traditional WB UV wood coating (right)

Characteristics of clear coating based on NeoRad™ R-700

GLOSS ON MELAMINE			ADHESION ON MELAMINE CROSSCUT (ASTM D3359-B)
20°	60°	85°	
1,5	5,9	11	4



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¹Please see the "Guidance on Use of Covestro Products in a Medical Application" document.
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