

NANORESINS

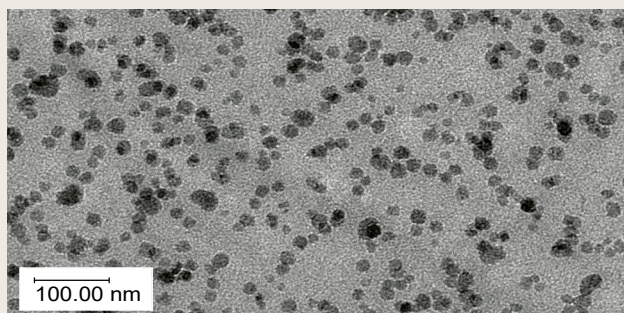
NANOCRYL® Nano Silica Composites

Nano composites for UV-curable formulations



Nano silica composites for UV-radiation curable formulations

- Suitable for protective coatings on plastic and metal substrates
- Excellent scratch and abrasion resistance of UV-cured coatings like displays or glasses
- High transparency enables a wide range of applications
- Gloss level remains unchanged



NANOCRYL® – At a Glance



Ready for the Future

- For 100% UV radiation curable formulations
- Low viscous nanosilica composites
- Variety of suitable resin carriers available



Application Properties

- Easy to incorporate
- Easy handling enabled by liquid form
- Shelf-life up to 24 months



Performance

- Outstanding scratch and abrasion resistance
- Stable gloss level maintained
- High transparency of the cured coating

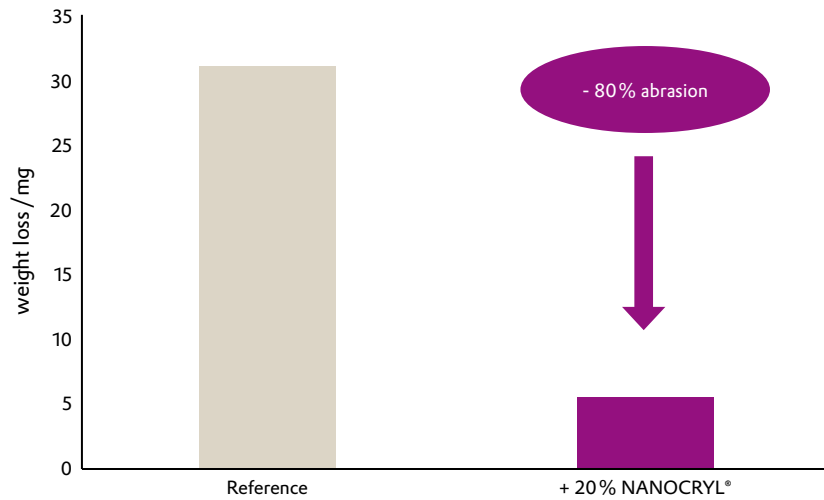


Click or scan the QR-code for more information!

Scratch and abrasion resistance

Conditions:

Cured film tested with
Taber® Abraser,
CS 10 rolls 1 kg weight,
1000 cycles



Portfolio of nano silica composites for UV-radiation curable formulations

Type	Monomer	Characterization	SiO ₂ content	Dynam. viscosity	Shelf-life
NANOCRYL® C 130	CTFA	Trimethylol propane formalacrylate	50%	275 mPa·s	18 months
NANOCRYL® C 140	HDDA	Hexanediol diacrylate	50%	175 mPa·s	24 months
NANOCRYL® C 150	TMPTA	Trimethylol propane triacrylate	50%	3.3 mPa·s	8 months
NEW NANOCRYL® C 152	TMPTA	Trimethylol propane triacrylate	50%	3.3 mPa·s	18 months
NANOCRYL® C 153-10	TMPEOTA	Trimethylolpropane ethoxylate triacrylate	50 wt-%	~1000 mPa·s	24 months

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NONINFRINGEMENT, MERCHANTABILITY AND / OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and / or recommendations at any time, without prior or subsequent notice. ACEMATT®, ADDID®, AEROSIL®, AIRASE®, ALBIDUR®, CARBOWET®, DYNOL™, NANOCRYL®, SILIKOFTAL®, SILIKOPHEN®, SILIKOPON®, SILIKOPUR®, SILIKOTOP®, SIPERNAT®, SURFYNOL®, TEGO®, TEGOMER® and ZETASPERSE® are registered trademarks of Evonik Industries or its subsidiaries. Evonik supports you in selecting the best suited product and optimizing current formulations through our Application Technology Group.

EVONIK OPERATIONS GMBH
Goldschmidtstraße 100
45127 Essen
Germany
Phone +49 201 173-2222
coating-additives@evonik.com
www.coating-additives.com