

# NANOCRYL® A 235

NANOCRYL® A 235 is a versatile dispersion of colloidal silica in a tetrafunctional polyether acrylate for the use in adhesive and electronic applications. The silica phase consists of surface-modified, synthetic SiO<sub>2</sub>-spheres of very small size (Ø 20 nm) and narrow particle size distribution. Despite the high SiO<sub>2</sub>-content of 50 wt%, NANOCRYL® A 235 is highly transparent, low viscous and shows no sedimentation due to the agglomerate-free dispersion of the nanoparticles in the acrylate.

## Technical data (no specification)

Property	Units	Typical Values
Base acrylate		alkoxylated (4) pentaerythritol tetraacrylate
Appearance		clear, slightly yellow liquid
SiO <sub>2</sub> -content	[wt%]	~ 50
Density @ 20 °C	[g/ml]	~ 1.3
Viscosity @ 25 °C	[mPas]	~ 2 500
Shelf life	[months]	6*

\*if stored in the original unopened container

## Processing Instructions

NANOCRYL® A 235 can be used as any common UV-curable acrylate. However, the compatibility between NANOCRYL® A 235 and all other components should be tested separately before starting formulation development. The colloidal silica in NANOCRYL® products tends to agglomerate if the stabilisation is affected by inappropriate formulation components like hydrocarbon solvents (e. g. xylene) or certain performance additives (e. g. several silicones or amines). A technical information leaflet "Suitable Additives for NANOCRYL®-Formulations" is available on request.

## Handling and Storage

NANOCRYL® A 235 should be handled in accordance with good industrial practice. Detailed information is provided in the Material Safety Data Sheet.

NANOCRYL® A 235 is hygroscopic. Therefore keep container tightly closed when not in use! The product may polymerise under improper storage conditions. Store below 30 °C.

06/2012

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

(Status: August 2014)

### Evonik Nutrition & Care GmbH

Charlottenburger Str. 9, 21502 Geesthacht, Germany

Phone: +49 4152 8092-0, Fax: 49 4152 79156

[nano-and-silicone-technology@evonik.com](mailto:nano-and-silicone-technology@evonik.com), [www.evonik.com/nano-and-silicone-technology](http://www.evonik.com/nano-and-silicone-technology)