

Technical Information

NANOCRYL® A 210

NANOCRYL® A 210 is a versatile dispersion of colloidal silica in a difunctional acrylate monomer for the use in adhesive and electronic applications. The silica phase consists of surface-modified, synthetic SiO₂-spheres of very small size (Ø 20 nm) and narrow particle size distribution.

Despite the high SiO₂-content of 50 wt%, NANOCRYL® A 210 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		hexanediol diacrylate
Appearance		clear, slightly yellow liquid
SiO ₂ -content	[wt%]	~ 50
Density @ 20 °C	[g/ml]	~ 1.3
Viscosity @ 25 °C	[mPas]	~ 100
Shelf life	[months]	6*

*if stored in the original unopened container

Processing Instructions

NANOCRYL® A 210 can be used as any common UV-curable acrylate. However, the compatibility between NANOCRYL® A 210 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).

Registration status

The ingredients of NANOCRYL® A 210 are listed in the following chemical inventories:

EINECS/ELINCS, TSCA, NDSL, ENCS, TCCL, PICCS, IECSC, TCSI

Further information is available on request.

Handling and Storage

NANOCRYL® A 210 should be handled in accordance with good industrial practice. Detailed information is provided in the Material Safety Data Sheet.

NANOCRYL® A 210 is hygroscopic. Therefore keep container tightly closed when not in use! The product may polymerise under improper storage conditions. Store between 15 and 30 °C

NANOCRYL® A 210 may crystallize at temperatures below 12 °C. Should this occur, the system can normally be re-homogenized by heating to room temperature and stirring. If this does not effect re-homogenization, please contact our sales department for further advice.

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