



IQ-BOND 8412 UV

Flexible, UV-curable, one component, acrylic-based adhesive for optical Applications

Product Description:

IQ-BOND 8412 UV is a UV-curable, solvent-free, one-component, pre-mixed, acrylic based adhesive, developed for optical applications, where non-yellowing is required.

Typical applications include bonding of glass and metals where high adhesion strength, hardness, and humidity resistance is required. Also for applications where a flexible adhesive is required, IQ-BOND 8412 UV is an excellent solution thanks to its low hardness and good elongation.

IQ-BOND 8412 UV has been developed for optical applications where a crystal clear appearance is required, combined with non-yellowing characteristics.

For cleaning un-cured IQ-BOND 8412 UV, the use of IQ-CLEANER 9500 is recommended.

Uncured Product Properties:

- Appearance: Transparent - crystal clear
- Chemistry: Acrylic
- Odor: Faint
- Density: ~ 1,06 gr/cc
- Mix-Ratio: Not Applicable – pre-mixed single component adhesive
- Viscosity: ~ 20.000 mPa.s (Brookfield RVII – CP51 – 25°C – 1 rpm)
- Cure Speed:

Spectrum	320 – 500 nm	UV and visible light
Intensity	50 – 5000 mW/cm ²	
Time	1 – 60 seconds	Depending layer thickness, and intensity of the UV equipment, as well as the UV transparency of the substrate(s)
Dose = Intensity x Time	1000 – 3000 mJ/cm ²	

Remark: As with most UV-acrylics, a tacky surface may form after UV-cure, depending the layer thickness. This tacky surface may be reduced by exposing longer UV-cure time and/or by curing under a N₂ or CO₂ atmosphere, to prevent oxygen-inhibition UV-adhesive.

Cured Product Properties:

- Temperature range of use: -40°C to + 125°C
- Die shear strength: > 6 MPa
- Refractive Index, cured: ~ 1,48
- Shore hardness: ~ 25 shore D

Storage stability:

Storage is recommended between 5°C and 25°C. Freezing temperatures are not recommended for IQ-BOND 8412 UV.

Under normal fridge temperatures 5°C – 8°C, the storage stability is 12 months from date of production, when stored in the original, closed containers.

It's recommended not to store IQ-BOND 8412 UV together with other adhesives such as 1 and 2-part epoxies, 2-part acrylics, polyurethanes, silicones cyanoacrylates, anaerobics, etc. Also contact with amines, amides and reducing agents should be avoided.

Attention:

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