



IQ-BOND 8416 UV

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

Product Description:

IQ-BOND 8416 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.

IQ-BOND 8416 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 8416 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: ~ 1.400 mPa.s (Brookfield RVII – CP51 – 25°C – 20 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: > 100 kg/cm²
- Refractive Index, cured: ~ 1,49
- Shore hardness: ~ 83 shore D

Storage stability:

Storage is recommended between 5°C and 25°C. Freezing temperatures are not recommended for IQ-BOND 8416 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 8416 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:

The technical information contained herein should not be used in the preparation of specifications, as it's intended for reference only. Please contact your local sales representative for support. The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Roartis specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Roartis products and services. Roartis specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license. We recommend that each prospective user tests his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more European or foreign patents or patent applications. The information contained in this data sheet corresponds to the present state of our knowledge ; it is intended for your guidance but we are not bound by it since we are not in a position to exercise control over the manner in which our products are used. Moreover, the attention of the user is drawn to the risks that could possibly occur should a product be used for an application other than that for which it is intended.