

# IQ-BOND 7291 UV

**One component, low viscosity, low thixotropy, self-levelling, epoxy-based,  
UV-curable FILL adhesive**

## Product Description:

IQ-BOND 7291 UV is a flowable, UV-curable, solvent-free, one-component, pre-mixed, epoxy based adhesive developed as a “fill” material in dam & fill applications.

IQ-BOND 7290 UV or IQ-BOND 7293 UV are the corresponding, high viscosity, high thixotropic, “dam” materials. As both materials are very similar in chemical composition, they can be easily co-cured during the same UV-curing process.

Typical applications include the encapsulation of wire-bonded IC's in smart card and/or other micro-electronic applications.

When properly cured, IQ-BOND 7291 UV exhibits good adhesion on typical substrates used in smart card technology, such as glass-fiber reinforced epoxy laminates.

Despite the high filler loading, IQ-BOND 7291 UV has a low viscosity. To assure optimum properties, it's recommended to rehomogenize IQ-BOND 7291 UV prior to usage.

For cleaning un-cured IQ-BOND 7291 UV, the use of IQ-CLEANER 9500 is recommended.

## Uncured Product Properties:

- Appearance: Off-white
- Chemistry: Epoxy
- Odor: Faint
- Density: ~ 1,3 – 1,4 gr/cc
- Mix-Ratio: Not Applicable – pre-mixed single component adhesive
- Viscosity: ~ 1.000 mPa.s (Brookfield RVII – CP51 at 25°C – 20 rpm)
- Thixotropy: ~ 1,1
- Cure Speed: ~30 seconds at 120 mW/cm<sup>2</sup> for a 500 µm thick layer (UV-A)

Although not all applications require a thermal post cure, this may help to reach optimum properties. If this is not feasible, final properties after UV-cure are realized 24hrs after the UV cure process.

### Cured Product Properties:

- Temperature range of use: - 40°C to + 125°C
- Die shear strength: > 100 kg/cm<sup>2</sup>
- Shore hardness: ~ 80 shore D

### Storage stability:

IQ-BOND 7291 is a material of which the chemistry is stable at room temperature for a long period of time. However, due to the high filler loading of the material, it's recommended to store IQ-BOND 7291, protected from light and moisture, at temperatures below 5°C. This will slow down the filler settling. In these conditions, the product remains stable for 6 months.

Prior to usage, during conditioning from storage temperature (< 5°C) to room temperature, it's recommended to rehomogenize IQ-BOND 7291 UV by tumbling (rolling) at about 5 – 10 rpm during 8 – 12 hrs.

It's recommended not to store IQ-BOND 7291 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.