TECHNICAL DATA SHEET

ABchimie15K UV
ABchimie15K UV LED

Sept 2025

UV /LED resin

ABchimie15K UV and ABchimie15K UV LED are transparent, single-component, solvent-free resins that cure immediately when exposed to UV or UV LED light.

ABchimie15K UV and ABchimie15K UV LED provide local protection for your electronic assemblies, offering good adhesion to metal and mechanical protection for high components against vibrations. They can also be applied in thin layers for bonding.

CHARACTERISTICS

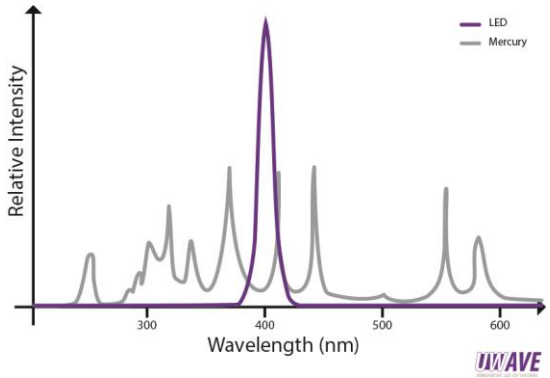
- Chemical and mechanical resistance,
- Clear resin
- Good UV resistance
- Very fast curing under UV LED exposure
- No VOC

CURING CONDITIONS

It is important to use the appropriate UV equipment (UV or LED) as well as the recommended settings for the best properties of cured conformal coating. These parameters have some effects on the reactivity and the surface of coating.

Whatever the curing system (polymerization), ABchimie15K UV and ABchimie15K UV LED resins are flexible resins and exhibit slight tack, even after complete polymerization.

The following graph shows the wavelength range emitted by the LED lamp, different from the spectrum of a mercury lamp.



1- ABchimie15K UV LED - LED curing

Recommended settings for the best properties of the resin ABchimie15K UV LED:

LED lamp 395 nm

Minimum UVA2 dose : **3000mJ/cm²** (to a 1mm-thickness)

The UVA dose is a minimum dose recommended. The intensity depends on the lamp power and the lampe distance.

UVA dose may be increased by a longer exposure time. A higher dose of UV or a overexposure will not damaged the product. However a lower UVA dose can have a detrimental effect on product final properties therefore it is very important to ensure minimum recommended UVA dose is met with your curing system.

2- ABchimie15K UV - UV mercury curing

Recommended settings for the best properties of the resin ABchimie15K UV LED:

Hg Lamp (Miniterm UV 250f Super, Aeroterm), 120W/cm

Minimum UVA dose : **1000mJ/cm²** (to a **100µm-thickness**)

Minimum UVA dose : **3000mJ/cm²** (to a **1mm-thickness**)

The UVA dose is a minimum dose recommended. The intensity depends on the lamp power and the lampe distance.

UVA dose may be increased by a longer exposure time. A higher dose of UV or a overexposure will not damaged the product. However a lower UVA dose can have a detrimental effect on product final properties therefore it is very important to ensure minimum recommended UVA dose is met with your curing system.

PROPERTIES

LIQUID PROPERTIES:

Color	Transparent
Composition	Acrylate
Viscosity (@ 25 °C)	7 000 mPa.s (approximative)
Non-volatile residue	100%

CURED PROPERTIES:

Thickness	100µm to 1.5mm
Color	Transparent
Hardness Shore (after 7 days)	D40
Temperature	From - 50°C à + 150 °C
Breakdown voltage (TM 650 2.5.7.1)	> 1500V AC
Humidity resistance	85°C 85%HR - 100hours

ABchimie15K UV and ABchimie15K UV LED are compliant with REACH and RoHS regulations. If you want a certificate, please contact us (info@abchimie.com).

PACKAGING:

Resin ABchimie15K UV LED

Syringe	15K UV LED S30
Cartridge	15K UV LED C330
Bulk 1kg	15K UV LED 01K
Bulk 5kg	15K UV LED 05K
Bulk 20kg	15K UV LED 20K

Resin ABchimie15K UV

Syringe	15K UV S30
Cartridge	15K UV C330
Bulk 1kg	15K UV 01K
Bulk 5kg	15K UV 05K
Bulk 20kg	15K UV 20K

Cleaner (for uncured material)

Bulk 5 litres	SND 05L
Bulk 5 litres	ABclean 05L

STORAGE AND SHELF LIFE :

ABchimie15K UV and ABchimie15K UV LED resin must be store in a dark container and closed. ABchimie15K UV and ABchimie15K UV LED mustn't be exposed at UV light.
In any case, please refer to MSDS for good storage conditions.

Storage temperature: 5 to 30°C
A temporary lower or higher temperature (maximum 40°C) during few days (transport) doesn't distort varnish properties.
In any case, please refer to MSDS for good storage conditions.

Date by use: 12 months after the date of manufacturing, protected from light, in original closed packaging.

All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification. ABchimie cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product. Toutes ces informations sont données en toute bonne foi mais sans garantie. Chaque application étant différente, il est vivement conseillé d'effectuer des tests préalables. Les spécifications concernant les propriétés sont données à titre indicatif et non comme étant spécifiques.