

ABchimie42K-UV LED

March 2024

UV LED soft resin, High viscosity

ABchimie42K-UV LED is a soft one component resin, UV curable which have a good adhesion on many substrates. It can be applied in high thickness deposit (few mm). Its curing is immediate with UV LED radiations.

ABchimie42K-UV LED gives local protection for your components, especially against humidity and high electric pressure. It also can be applied to bring robustness to your systems.

CHARACTERISTICS

- Soft resin,
- Protection against humid and thermal environments,
- Excellente adhesion on many substrates (PCB, plastics,...),
- No VOC,
- Product cured until 5mm-thickness
- Very fast curing under UV exposure
- Space ground reduced compared with solvent bases.
- High speed process, increase of the productivity.
- **Approved UL 94V0 (QMJU2-E308681).** 

DRYING TIME AND CURING CONDITIONS

ABchimie42K-UV LED cures with UV LED technology.

LED UV curing:

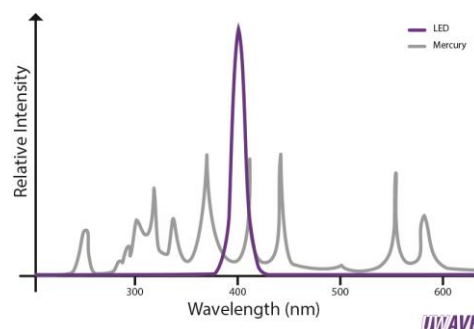
It is important to use the appropriate LED equipment, as well as the recommended settings for the best properties of the resin ABchimie42K-UV LED:

LED lamp 395 nm

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

The UVA2 dose is a minimum dose recommended. The intensity depends on the lamp power and the lamp distance. UV 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.

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



LIQUID PROPERTIES:

Color	Transparent (light yellow coloration)
Composition	Urethane Acrylate
Viscosity (@ 21 °C)	38 000 – 46 000 mPa.s (estimated)
Specific gravity (20°C)	1,1

CURED PROPERTIES:

Color	Transparent (light yellow effect)
Hardness Shore (after 7 days)	25D
Tg	-6°C
CTE (-40 to 10°C)	150 ppm/°C
CTE (30 to 105°C)	240 ppm/°C
VRT test	-25°C +70°C, 100 cycles, pente 1°C/mn
Moisture heat	85°C, 85%HR, 100h
Temperature	From - 50°C à + 150 °C
Auto-extinguishing	UL94 V0
Dielectric strength	60kV/mm

ABchimie42K-UV LED is compliance with REACH and RoHS regulations. If you want a certificate, please contact us (info@abchimie.com).

PACKAGING :

Resin ABchimie 42K-UV LED

Bulk 1kg	ABchimie 42K-UV LED 01K
Bulk 5kg	ABchimie 42K-UV LED 05K

Cleaner

Bulk 5 litres	SND 05 L
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STORAGE AND SHELF LIFE :

ABchimie42K-UV LED must be store in a dark container and closed. ABchimie42K-UV LED mustn't be exposed at UV light.

After a long storage (> 1week) ABchimie42K UV LED could settle. ***It has to be mixed before use.***

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

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.