

Aqualux MSL IQ

3731

Water-based, UV-curing multicoat varnish for furniture and interior finishing, for industrial use

PRODUCT DESCRIPTION

General

Water-based, UV-curing clear varnish for wood with a rapid initial physical drying phase. Can be used as either a single or two-component product. Very good mechanical resistance and good chemical resistance, very good transparency, good stability on vertical surfaces and outstanding filling performance.

Special properties and standards



- **ÖNORM A 1605-12 (furniture surfaces)**
Resistance to chemical reactions: 1-B
Response to abrasion: 2-D (≥ 50 U)
Response to scratches: 4-D ($\geq 1,0$ N)
Flame treatment: 5-B (highly non-flammable furniture surfaces)
- **DIN 68861 (furniture surfaces)**
Part 1: Response to chemical stress: 1 B
Part 2: Response to Abrasion: 2 D (> 50 to ≤ 150 U)
Part 4: Response to scratches: 4 D ($> 1,0$ to $\leq 1,5$ N)
- **ÖNORM A 3800-1 (fire behaviour)**
In conjunction with a flame-retardant substrate:
flame-retardant, Q1, Tr 1
- **DIN 4102-B1 (fire-retardant)**
Confirmed by an external test certificate.
In conjunction with flame-retardant laminated plywood – even veneered.
- **French ordinance DEVL1104875A**
Marking of construction coating products for their emission of volatile pollutants: A+

Application area



One-component: For the coating of furniture surfaces exposed to normal levels of stress (such as bedroom suite and living room furniture, application areas III to IV according to ÖNORM A 1610-12).

Two-component: For the coating of furniture surfaces exposed to high levels of stress (such as kitchen and bathroom furniture, tabletops, etc., application areas II – IV according to ÖNORM A 1610-12).

For hardly inflammable or flame-retardant coating systems.

PROCESSING

Processing instructions



- Please stir the product before use.
- The temperature of the product and object, and the room temperature must be at least + 15 °C.
- Aqualux MSL IQ (3731) is designed above all for the "varnish-on-varnish" working method. Aqualux MSL IQ (3731) can be used in a one or two-component process. Applying two spraying coats with the appropriate intermediate sanding results in visually attractive and high-quality furniture surfaces.
- Various types of wood such as Oak, various exotic woods, etc. contain water-soluble substances, which become active when overcoating with water-based furniture coatings. Depending on the origin of the timber different levels of discolouration (greenish cast) can occur when the painted areas are exposed to daylight. When painting **oak and other types of woods rich in extractives** we recommend priming them first with **Bluefin Baselux (3810)**. For the wood type **larch** we recommend **Aduro Primer (2523)** as a base-coat.
- If an even more pronounced grain accentuation is wanted on dark timbers, the wood should be stained before coating.
- Regarding wood stains that can be used under water-based UV paints, please contact your technical adviser.
- We do not recommend using Aqualux MSL IQ (3731) as a topcoat on white pigmented surfaces.
- Any change in the processing sequence, environmental conditions, non-observance of instructions or the use of products not listed may have an unfavourable effect on the result.
- Please follow our **ARL 150 - Working guidelines for water-based furniture coatings**.

Blending ratio



For 2K processing:

100 Part(s) by weight Aqualux MSL IQ (3731)
5 Part(s) by weight Aqua-Hardener 8451 (8451000210)

Aqua-Hardener 8451 (8451000210) must be carefully worked into the product by stirring before processing. We recommend waiting approx. 10 minutes before starting work.

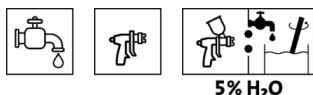
Pot life



4 hour(s)

A further extension of the pot life is not possible.
Increased temperatures reduce the pot life.

Application technique



| | Airless | Airless air-supported (Airmix®, Aircoat, etc.) | Cup gun |
|---|-------------|--|---------|
| Spraying nozzle Ø (mm) | 0,23 - 0,33 | | 2,0 |
| Spraying pressure (bar) | 100 - 120 | | 3 - 4 |
| Vaporizer Air (bar) | - | 1 - 2 | - |
| Diluent | Wasser | | |
| Diluent amount added (%) | - | | 5 |
| Applied quantity per application (g/m²) | 100 - 120 | | |

| | |
|---|-----------|
| Total quantity applied (g/m²) | max. 450* |
|---|-----------|

*(Primer and topcoat)

The shape and surface condition of the workpiece as well as the type of application influence the actual consumption. Accurate values for consumption must be obtained by applying trial coats in advance.

Drying conditions

Flashing off the water:

| | |
|--------------------|---|
| 35 - 45 Minuten | belt-type pallet drier (Rising temperature up to max. + 50 °C, air speed approx. 2 m/s) |
| or | |
| 15 - 20 Minuten | Flat channel dryer (Rising temperature up to max. + 50 °C, air speed approx. 2 m/s) |

The mentioned system parameters are reference values, which must be coordinated with the respective plant. Drying depends, for example, on the type of wood, workpiece shape, layer thickness, temperature, air exchange, relative humidity, stacking pressure and stacking conditions.

UV curing

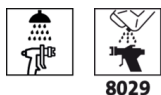


Feed 2 - 3 m/min (with one radiator)

UV high-performance radiator 80 - 120 W/cm

The feed can be increased in direct proportion to the number of radiators.

Cleaning the working equipment



8029

With water immediately after use.

To remove dried paint residues we recommend using Aqua-Cleaner (8029) (diluted 1:1 with water).

SUBSTRATE

Type of substrate

Hardwoods and softwoods

Substrate property

The substrate must be dry, clean, capable of holding the paint, free from separating substances such as grease, wax, silicone, resin etc. and free from wood dust, as well as tested for suitability for coating.

Substrate preparation

Wood sanding

Hardwoods: Grit size 150 - 180

Softwoods: Grit size 100 - 150

COATING SYSTEM

Primer coat

1 x Aqualux MSL IQ (3731)

Intermediate sanding



Grit size 240 – 320

Avoid sanding straight through!

Remove sanding dust.

Topcoat

1 x Aqualux MSL IQ (3731)

CLEANING AND MAINTENANCE

Cleaning and Maintenance Cleaning with Clean-Möbelreiniger (7202) and care with Clean-Möbelpflege Plus (7222).

ORDERING INFORMATION

Size of trading unit 25 kg
More sizes on request.

Colour shades / Glosslevels Aqualux MSL IQ G15 (3731000115)
Aqualux MSL IQ G20 (3731000120)
Aqualux MSL IQ G50 (3731000150)

Supplementary products Aduro Primer (2523)
Aqua-Cleaner 8029 (8029)
Bluefin Baselux (3810)
Clean-Möbelpflege Plus (7222)
Clean-Möbelreiniger (7202)
Aqua-Hardener 8451 (8451)
Please refer to the corresponding technical data sheets of the products.

FURTHER DETAILS

Durability / storage



Min. 6 month(s) in the original sealed containers.

Make sure the product is protected against moisture, direct sunlight, frost and high temperatures (above 30 °C).

Technical specifications

Delivery viscosity: 29 second – 33 second according to DIN 53211
(6 mm measuring cup, 20 °C)

Safety information



The product is only suitable for industrial use.

The inhalation of paint aerosols during spray application must generally be avoided. This is ensured by the proper use of a respirator (combination filter A2/P2).

Further information on the subject of safety during transport, storage and handling as well as disposal can be found in the relevant safety data sheet. The current version can be accessed on the Internet at www.adler-lacke.com.