

# AKVILAC FD

Eco-friendly lacquer solutions for the wood furniture and joinery industries

Water-borne lacquers are becoming more popular because of environmental issues. Their low amount of volatile organic compounds is the main driving force when changing from solvent-borne products to water-borne alternatives. Also, the improved quality of water-borne lacquers makes them more attractive to customers.

## **Akvilac FD 25** **Akvilac FD-J 10**

- New water-borne technology
- Very fast drying
- Superior wood wetting and clarity
- Excellent chemical resistance
- Give a very hard surface and good scratch resistance .



# AKVILAC FD LACQUERS

The new **Akvilac FD 25** and **Akvilac FD-J 10** lacquers are among the latest developments for the wood furniture and joinery industries. Their excellent appearance and resistance properties make both lacquers suitable for different kinds of wood applications, such as furniture, panels, mouldings, book shelves, doors, etc. Akvilac FD-J 10 has been mostly designed for the joinery industry. The viscosity of the lacquers is about 40–60s (DIN4), and they are ready for spraying without thinning.

## MAIN PROPERTIES

The lacquers are very fast drying and have excellent wood wetting and levelling properties. The lacquer is dry to sand and also stackable after 3–5 mins of drying time, when elevated temperatures such as 40–50°C and IR drying are used.

The colour and the structure of the wood appear very natural, because the lacquer film is very transparent. At the same time, the very hard surface looks like one made with a solvent-borne lacquer, and its scratch and chemical resistance are very good. The lacquer film resists normal household chemicals very well, and even staining liquids such as coffee give acceptable results.

## Chemical and scratch resistance

	Test Method	Time	Akvilac FD 25	Akvilac FD-J 10	Merit 30
Water	EN 12720	16h	5	5	5
Water	EN 12720	24h	5	5	5
Coffee	EN 12720	1h	4	5	5
Ethanol	EN 12720	1h	5	4	5
Paraffin oil	EN 12720	24h	5	5	5
Scratching 5N + fat	SS 839122/SFS 4367	24h	5	5	5
Scratching 8N + fat	SS 839122/SFS 4367	24h	4	5	5
Heat + dry 70°C	EN 12721/12722	20min	5	5	5
Sweat acidic	EN ISO 105-E04	1h	5	5	5
Sweat basic	EN ISO 105-E04	1h	5	5	5

Chemical and scratch resistance results for the water-borne Akvilac FD 25 and Akvilac FD-J 10 and the solvent-borne Merit 30 lacquers. Application 2x100 g/m<sup>2</sup>. Result scale 1–5, where 1 is the worst and 5 is the best; only 4 and 5 are accepted.

## Typical lacquer system for interior doors, frames and mouldings, etc.

	Product	Application	Wet film
Stain	Akvi or Dicco Color	Spraying	60–80 g/m <sup>2</sup>
Sealer	Akvilac FD 25, FD-J 10	Spraying	70–100 g/m <sup>2</sup>
Top lacquer	Akvilac FD 25, FD-J 10	Spraying	70–100 g/m <sup>2</sup>

## Technical data

	Akvilac FD 25	Akvilac FD-J 10
Solid content, of volume	29 %	23 %
Gloss grade	Semi-matt	Matt
VOC content	16 g/l	30 g/l
Dry to sand in 50°C	3–5min	3–5min
Tinting system	Akvi Tone	Akvi Tone

## APPLICATIONS

The lacquers are suitable for fast, automatic spraying lines with convection plus IR-drying units as well as for hand spraying and room-temperature drying. They are also suitable for use as priming lacquers before applying water-borne UV lacquer Luminol Clear 25, making the lacquer system more economical. For dipping application, the lacquer can be thinned about 25–30% with water, and then the viscosity is ready for dipping.