



# FR100

Intensive cleaning spray for manual cleaning of stubbornly contaminated PCB assemblies.

Part No.: 091602 // Content: 12 x 200 ml spray bottle

## CLEANING TECHNOLOGY

Made in Germany



### Application overview

Manual cleaning is done by spraying the detergent to the surface to be cleaned. The ESD-safe cleaner themselves evaporates residue-free. The dissolved flux residues then can be easily removed using the bottle's brush head, which is particularly gentle on components.

If a firmer brush head is required for permanent removal, the bristles can simply be shortened by a few millimeters.

Technical data	
Color	tansparent
Initial boiling point and range	60 °C
Flash point	-25 °C
Lower explosion limit	0,8 Vol.-%
Upper explosion limit	8 Vol.-%
Application	pure
Application temperature	20 - 45 °C
Storing (in original container)	10 - 30 °C
CLP / GHS	GHS 02, 07, 09
FR100 is a special cleaning spray for manual cleaning of assemblies. FR100 spray is ideal for particularly stubborn soiling. For lighter soiling, the use of kolb FR60-Spray, part number 091602, with even shorter exposure time is recommended.	

Contaminations	
Adhesive / Glue	—
Paste	—
Solder paste (soldered)	++
Flux	++
Oil / Grease	+
Coating / Varnishing	—
Machine technologies	
Spray-in-air / (PowerSpray®)	—
Spray-in-immersion	—
Air-in-immersion (AirFlow®)	—
Ultrasonic systems	—
Manual application	++

**++ = ideal for application, + = recommended, o = optionally applicable, — = not recommended**

**Note:** The spreadsheet only shows a general overview of the product specifications.

Cleaning tests are reasonable to determine the optimum cleaner configuration. Such tests may be carried out directly at the kolb demonstration center in Willich / Germany or Shanghai / China or can be initiated by contacting your local kolb partner.

kolb FR100 is compliant with all worldwide legal regulations and directives (REACH, RoHS, TSCA etc.) on the basis of own internal checks, analyses provided by suppliers and / or material certifications of the raw materials used in the production of kolb Cleaning Technology GmbH.