



## MultiEx® VR-HPA

Multifunctional aqueous alkaline broadband cleaning detergent for colophonium, flux and solder paste

Part No. 090664-RM25 // Content: 25 l

Part No. 090664-RM200 // Content: 200 l (Barrel)

## CLEANING TECHNOLOGY

Made in Germany



### Application overview

Most suitable	Suitable	Optional suitable	Optional suitable	Optional suitable
PCBAs, Hybrids Power electronics Misprints (mounted)	Stencils Screens Misprints (bare boards)	Solder frames Solder carriers Solder masks	ESD boxes Containers Magazines	Condensation traps Filters Steel sheets

#### Technical data

Color	transparent
Phases	multiphase
pH-value at 20 °C	11,0
Conductance at 20 °C	< 100 µS/cm
Flash point	> 100 °C
VOC content	< 20 %
Water solubility	fully soluble
Application	undiluted
Application temperature	20 - 45 °C
Storing (in original container)	10 - 30 °C
CLP / GHS	GHS 07
MultiEx® VR-HPA is a broadband cleaner for PCBs with sensitive components (e.g. aluminium) and cleans particularly colophonium and flux as well as solder paste quickly, thoroughly and with best material protection from PCBs, ceramic substrates, misprints, stencils, solder frames, magazines, aluminium, stainless steel.	
ReadyMix for direct use in a cleaning system	

**kolb** MultiEx® VR-HPA 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.

#### Contaminations

Adhesive / Glue	++
Solder paste	++
Flux	++
Thermal compounds	++
Oxides	++
Coating / Varnishing	—

#### Machine Technologies

Spray-in-air / (PowerSpray®)	++
Spray-in-immersion	++
Air-in-immersion (AirFlow®)	++
Ultrasonic systems	+
Manual application	o

**++ = 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.