



MultiEx® VR-SP

CLEANING TECHNOLOGY

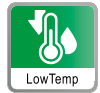
Made in Germany

Multifunctional aqueous alkaline broadband cleaning concentrate for oxides, flux and solder paste

Part No. 090678-CN25 // Contents: 25 l

Part No. 090678-CN200 // Content: 200 l (Barrel)

Part No. 090678-CN1000 // Content: 1000 l (IBC)



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
ph-value at 20 °C	11,2
Conductance at 20 °C	< 100 µS/cm
Flash point	> 100 °C
VOC content	< 20 %
Standard mixing ratio	1:3 (effective from 10 %)
Water solubility	fully soluble
Application temperature	20 - 45 °C
Storing (in original container)	10 - 30 °C
CLP / GHS	GHS 07
MultiEx® VR-SP is a broadband standard PCB cleaning (single phase) concentrate and cleans particularly oxides 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.	
Concentrate for blending with water	

kolb MultiEx® VR-SP 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	o
Solder paste	++
Flux	++
Thermal compounds	—
Oxides	++
Condensate / Grease / Oil	+
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.	