



# MultiEx® 3D-H2

## CLEANING TECHNOLOGY

Made in Germany

Aqueous 3-dimensional special detergent combining  
1. flux removal, 2. deoxidizing 3. passivating

Part No. 090663-RM25-2 // Content: 25 l

Part No. 090663-RM200 // Content: 200 l (Barrel)

Part No. 090663-RM1000 // Content: 1000 l (IBC Container)



### Application overview

Most suitable	Suitable	Optional suitable	Optional suitable	Not 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	farblos
pH-value at 20 °C	10,4
Flash point	> 100 °C
VOC content	< 20 %
Water solubility	easily soluble
Application	pure
Application temperature	20 - 45 °C
Storing (in original container)	10 - 30 °C
CLP / GHS	GHS 07
MultiEx® 3D detergents work in three dimensions: 1. Flux removal, 2. Deoxidation of the metal surfaces, especially with copper and aluminum, 3. Passivation of the metal surfaces. MultiEx® 3D-H2 is a standard broadband cleaner for PCBA and DCBss.	
Detergent ReadyMix for direct use in a cleaning system. If necessary kolb AntiFoam F12 (Part No. 090683-1) is recommended as defoamer additive.	

kolb MultiEx® 3D-H2 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	++
Coating / Varnishing	—
Machine Technologies	
Spray-in-air / (PowerSpray®)	++
Spray-in-immersion	+
Air-in-immersion (AirFlow®)	+
Ultrasonic systems	+
Manual application	o
<b>++ = ideal for application, + = recommended, o = optionally applicable, — = not recommended</b>	
<b>Note:</b> 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.	