

ALPHA[®] EXTERNAL FLUX COATING

For Exactalloy[®] Solder Preforms

DESCRIPTION

Flux coated Exactalloy preforms offer a significant increase in productivity in processes requiring flux. Rosin based formulas are available in a full range of activity levels (see flux overview and classification chart). With Alpha's unique glazing process, flux coatings can be fused into a clear, continuous surface, highly resistant to flaking and flux loss during storage and handling. The external flux coating is designed to become active prior to the complete melting of the solder preform. It flows to cover the solder preform during its transformation from solid to liquid, while providing wetting action for the substrates being soldered.

Compared to flux filled preforms, by the very nature that the flux is already available at the place of need, the flux coated preforms provide the flux earlier in the soldering process to the area where it is designed to do its work. Highly specialized flux formulas are also available that feature clear, colorless residues and flexible coatings, enabling bending or folding of the fabricated preform after the flux has been applied. Another key consideration is the low flux weight percent required to yield good solder wetting. Flux percentages ranging from .25 to 1.5% are sufficient for most preform applications. The result is lower levels of residual flux in no clean applications versus solder paste applications.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- Low flux-percentage (0.25 to 1.5% by weight) with good results
- Very low levels of flux residue
- Superior wetting vs. internally fluxed preforms
- Color addition possible for easy part identification
- Temperature sensitive color indicators available to confirm minimum reflow temperature history
- Broad range of activity levels for highly sensitive electronic through hard to wet industrial applications

TECHNICAL DATA

Flux overview and classification:

Flux Overview			Flux Classification		Historical Flux Classification		
Flux Type	Acid Value [mg KOH/g]	Halide [by wt%]	EN 29454	J-STD-004	DIN 8511	IPC-SF-818	QQS 571
RS 1	155 to 170	<0.005	1.1.3	ROL0	F-SW-32	L3CN	R
RS 2	160 to 175	<0.005	1.1.3	ROL0	F-SW-32	L3CN	RMA
RS 2.1	160 to 175	0.05 to 0.10	1.1.2	ROL1	F-SW-26	M3CN	RMA
RS 2.2	160 to 175	0.10 to 0.14	1.1.2	ROL1	F-SW-26	M3CN	RMA
RS 3	165 to 180	0.40 to 0.50	1.1.2	ROL1	F-SW-26	L2CN	RA
RS 4	165 to 180	0.60 to 0.75	1.1.2	ROM1	F-SW-26	M3CN	RA
RS 6	165 to 180	0.90 to 1.10	1.1.2	ROH1	F-SW-26	M3CN	RSA
RS 7	175 to 195	1.40 to 1.75	1.1.2	ROH1	F-SW-26	M3CN	RSA

REFLOW PROFILES

The Exactalloy solder preform flux coating has very low solvent contents. Therefore, a pre-heat period is not required. Excessive heat should be avoided as charring may occur. Direct flame heating is not advised as both the flux and the residue are flammable.

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at MacdermidAlpha.com/assembly-solutions/knowledge-base.**

CONTACT INFORMATION

To confirm this document is the most recent version, please contact
Assembly@MacDermidAlpha.com
www.macdermidalpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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