

ALPHA 711, 711-25, 809, 811, 815

Fully Activated Rosin Fluxes - Standard Type RA

DESCRIPTION

These Type RA fluxes are homogenous solutions of pure water-white rosin in organic solvents containing considerably stronger activating agents than those in Type RMA fluxes. For high reliability, flux residues should be removed after soldering.

Foam: 809, 811, 815
 Wave: 711, 711-25

All of these fluxes are particularly suitable for soldering to the following metals:

Beryllium Copper	Lead	Solder (Hot Dip)
Brass	Nickel (Plate)	Terne (Plate)
Bronze	Silver	Tin (Hot Dip)
Cadmium (Plate)	Solder (Plate)	Tin (Plate)
Copper		

ALPHA 711, 711-25, 809, 811, and 815 are the most commonly used Type RA fluxes when it is not necessary to meet the requirements of MIL-F-14256D. They are more active than Alpha QPL-approved Type RA fluxes.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT INFORMATION

<u>Rosin Type:</u>	All of these Type RA fluxes contain a quality grade of water-white gum rosin that meets the requirements of Class A of Type 1, Grade WW of Federal Specification LLL-R-626. The high degree of purity of the rosin used insures consistent flux performance.
<u>Packaging:</u>	All Alpha Type RA fluxes are available in 1, 5, and 55 gal. containers.

APPLICATION GUIDELINES**Foam:****ALPHA 809**

Alpha's most versatile foam flux containing 25% solids. Excellent for soldering single-sided and double-sided, plated-through-hole boards where solderability is good and with oil injection soldering machines.

ALPHA 811

Similar to 809, for soldering single-sided boards. 811 has a higher activator-to-rosin solids ratio than 809. Lesser amount of residues after soldering makes for easier cleaning.

ALPHA 815

Similar to 809, with 35% solids content. Has good capillary action for soldering double-sided, plated-through-hole and multilayer boards, including use in dry-wave soldering machines. High solids content provides a thermal barrier effect, making the flux particularly suitable where there is prolonged contact with the solder wave, such as in drag soldering or double-wave machines.

Wave:**ALPHA 711**

High solids contents (57%) ensures adequate flux coverage and protection of boards during soldering, even at high temperatures and extended soldering times. IPC J-STD-004 Designation: ROM1

ALPHA 711-25

Medium solids content (25%) for those applications where a lesser amount of residue is desired on the soldered assembly for easier cleaning. All 711-series fluxes are effectively used for solder coating or tinning bare leads of solderable metals. IPC J-STD-004 Designation: ROM1

Residue Removal: For effective removal of flux residues, a bipolar solvent cleaner blend such as ALPHA 564, 565, or 1003 – or an aqueous saponifier such as ALPHA 2100 – is recommended. These cleaners remove both ionic and non-ionic contamination.

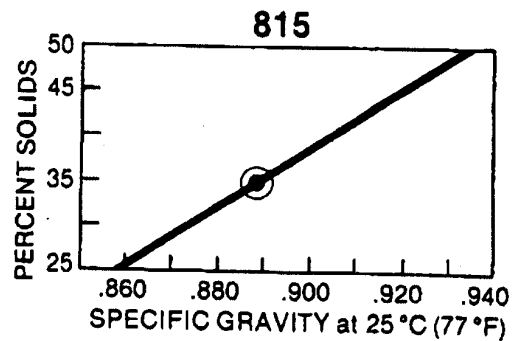
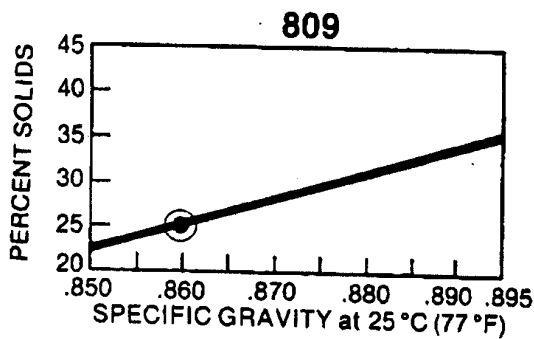
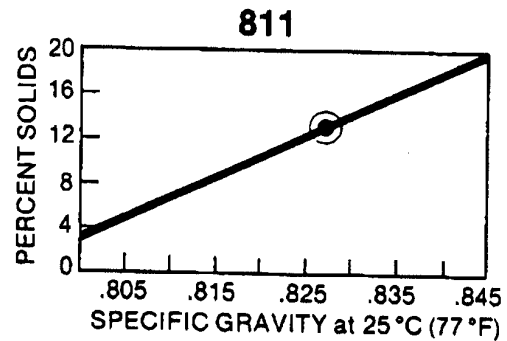
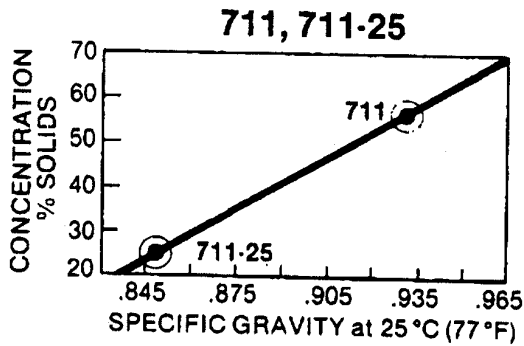
Thinning: The specific gravity of a flux is a measure used to determine its solids content; it should be checked periodically during each 8 hour shift. Flux thinner should be added, as necessary, to make up for solvent evaporation losses and to maintain proper solids content for optimum performance. Refer to appropriate graphs below. After adjusting specific gravity, fresh flux should be added to replace drag-out and maintain the proper level in the flux pot.

Because of foreign matter contamination from air and conveyor systems which degrade the flux, after 40 hours of total operation, the flux should be discarded and the flux pot cleaned and recharged with fresh flux.

711, 711-25 Use only ALPHA 412 Thinner
809, 815 Use only ALPHA 425 Thinner
811 Use only ALPHA 812 Thinner

TECHNICAL DATA

Category	711	711-25	809	811	825
Physical Properties					
Percent Solids	57	25	25	13	35
Specific Gravity at 25 °C (77 °F) ± 0.005	.933	.847	.860 (± 0.010)	.826 (± 0.010)	.884 (± 0.010)
Lb/Gal at 25 °C (77 °F)	7.76	7.05	7.16	6.87	7.35
Typical water Extract Resistivity (K ohm-cm)	34	36	37	46	51
Typical Flash Point (Tag Closed Cup)	18 °C (64 °F)	18 °C (64 °F)	14 °C (58 °F)	16 °C (61 °F)	17 °C (62 °F)



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
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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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