435 Preforms
Organic Water-Soluble Flux Coating for Preforms

Product Description

Kester 435 is an organic, high activity, acid flux. 435 is heat stable, exhibits excellent wetting capabilities and has less odor than most competitive internal water-soluble based products. The residues left by 435 are near neutral pH and therefore also less corrosive. 435 is suited for use in a wide variety of preform applications.

Performance Characteristics:
- Highest activity for soldering most metals
- Easily cleaned in warm water
- Compatible with leaded and lead-free alloys
- Low voiding and outgassing
- Classified as ORH1 per J-STD-004

RoHS Compliance

Kester does not determine any applicable Restriction of Hazardous Substances (RoHS) exemptions for our lead containing products at the user level.

Reliability Properties

Copper Mirror Corrosion: High
Tested to J-STD-004, IPC-TM-650, Method 2.3.32

Corrosion Test: High
Tested to J-STD-004, IPC-TM-650, Method 2.6.15

Silver Chromate: Fail
Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Chloride and Bromides: 0.7%
Tested to J-STD-004, IPC-TM-650, Method 2.3.35

Fluorides by Spot Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1

Surface Insulation Resistance (SIR):
Pass
Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3

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<thead>
<tr>
<th></th>
<th>Blank</th>
<th>435 (cleaned)</th>
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</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>9.7×10^8 Ω</td>
<td>1.4×10^8 Ω</td>
</tr>
<tr>
<td>Day 4</td>
<td>8.3×10^8 Ω</td>
<td>1.4×10^8 Ω</td>
</tr>
<tr>
<td>Day 7</td>
<td>7.6×10^8 Ω</td>
<td>1.2×10^8 Ω</td>
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Application Notes

✔ Availability

Kester Preforms are available in a wide variety of shapes, sizes and alloys and are offered with and without flux. Preforms can be coated in a variety of weight percents with typical flux ranges available from 0.75-2.5% by weight. Consult the alloy temperature chart on Kester's website for a comprehensive alloy list. The amount of flux on the preform dictates the ease of soldering for an application. Preforms are typically packaged in bulk containers, but can be placed in specialty packaging to accommodate a variety of applications.

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Cleaning

The 435 flux residue is conductive and will cause corrosion of metal parts over time. Residue removal should be completed within 48 hours. 435 Organic Flux has the advantage over many competitive water-soluble flux formulations in that the residue is easily and completely removed with plain hot water (40-60°C/120-140°F). Softened tap water or deionized water is recommended for high reliability. Use of hard or high mineral content tap water will increase ionic cleanliness measurement levels.

Storage and Warranty Period

Storage must be in a dry, non-corrosive environment between 10-40°C (50-140°F). The surface may lose its shine and appear a dull shade of grey. This is a surface phenomenon and is not detrimental to product functionality. Flux coated preforms have a limited warranty period determined by the alloy used in the preforms. For alloys containing more than 70% lead, the warranty period is 2 years from the date of manufacture. Other alloys have a warranty period of 3 years from the date of manufacture.

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet (SDS) and warning label before using this product.

Global Headquarters: 800 West Thorndale Avenue, Itasca, IL USA 60143  •  Phone: +1 800.2.KESTER  •  Fax: +1 630.616.4044
Asia-Pacific Headquarters: 61 Ubi Avenue 1 #06-01 UB Point, Singapore 408941  •  Phone: +65 6.449.1133  •  Fax: +65 6.242.9036
European Headquarters: Ganghofer Strasse 45, 82216 Gernlinden, Germany  •  Phone: +49 (0) 8142 4785 0  •  Fax: +49 (0) 8142 4785 61
Asia Manufacturing: Hengqiao Road, Wujiang Economic Development Zone • Suzhou, Jiangsu Province, China 215200  •  Phone: +86 512.82060807  •  Fax: +86 512.8206 0808
Website: www.kester.com