Handy Flo® 370

**GENERAL DESCRIPTION**

Handy Flo 370 is a solvent based, clean burning, fluxless binder system used in brazing of assemblies in dry atmospheres such as nitrogen, hydrogen, argon, dissociated ammonia and vacuum. This system, when blended with an appropriate filler metal will form a paste that exhibits very little slump when heated and can be dispensed through standard dispensing equipment.

**PRODUCT APPLICATION**

Handy Flo 370 is recommended for use with a wide variety of braze filler metals that flow above 1100°F (593°C) and include (but is not limited) to the following braze filler metals:

<table>
<thead>
<tr>
<th>Product Name</th>
<th>AWS Designation</th>
<th>Solidus °F / °C</th>
<th>Liquidus °F / °C</th>
<th>Nominal Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premabraze 131</td>
<td>BVAu-4</td>
<td>1740 / 949</td>
<td>1740 / 949</td>
<td>18 / 82 Au</td>
</tr>
<tr>
<td>Premabraze 616</td>
<td>BVAg-29</td>
<td>1155 / 625</td>
<td>1305 / 705</td>
<td>61.5 / 24 / 14.5 In</td>
</tr>
<tr>
<td>Silvaloy 604</td>
<td>BVAg-18</td>
<td>1115 / 600</td>
<td>1325 / 720</td>
<td>60 / 30 / 10 Sn</td>
</tr>
<tr>
<td>Silvaloy 559</td>
<td>BVAg-13a</td>
<td>1420 / 770</td>
<td>1640 / 895</td>
<td>56 / 42 / 2</td>
</tr>
<tr>
<td>Silvaloy 721</td>
<td>BVAg-8</td>
<td>1435 / 780</td>
<td>1435 / 780</td>
<td>72 / 28</td>
</tr>
</tbody>
</table>

**BRAZING CHARACTERISTICS**

Handy Flo 370 is recommended as an easy to dispense solvent based binder system. It is designed to offer excellent cold slump characteristics, but poor hot slump characteristics. The paste deposit will have little to no tailing once dispensed and will hold its form until the heating cycle begins in the furnace. Once heated, the paste will flatten across the surface to aid in filler metal flow. This is perfect for pre-wetting of carbides and electrical contact subassemblies with brazing material. This system dries slowly and will not flake off the parts prior to heating operation; which allows pre-pasting of assemblies several hours prior to brazing operation. Handy Flo 370 is exceptionally clean burning. There is no residue following the brazing process. This product is recommended for dry hydrogen (H₂) atmosphere, inert atmosphere, or vacuum.

**WARRANTY & STORAGE**

Lucas-Milhaupt, Inc. warrants their Brazing and Soldering Paste products for 90 days from the date of shipment if stored in the original unopened container. Optimal storage conditions would be 65°F (18°C) - 75°F (24°C), clean and dry. It is recommended that the paste products are stored away from direct heat. Paste may require mixing to regain a homogenous mixture before application.

The 90 day warranty should not be interpreted as the shelf or useful life of the product. The paste products may be used well beyond the 90 day warranty, unless customer testing or production results indicate unsatisfactory performance of the product.

**SPECIFICATIONS**

Handy Flo 370 conforms to the following specifications: N/A
APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 83-370.

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information, refer to the Material Safety Data Sheet for Handy Flo 370.

WARRANTY CLAUSE

Lucas-Milhaupt, Inc. believes the information contained herein to be reliable. However, the information is given by Lucas-Milhaupt, Inc. without charge and the user shall use such information at its own discretion and risk. This information is provided on an "AS IS" AND "AS AVAILABLE" basis and Lucas-Milhaupt, Inc. specifically disclaims warranties of any kind, either express or implied, including, but not limited to, warranties of title or implied warranties of merchantability or fitness for a particular purpose. No oral advice or written or electronically delivered information given by Lucas-Milhaupt, Inc. or any of its officers, directors, employees, or agents shall create any warranty. Lucas-Milhaupt, Inc. assumes no responsibility for results obtained or damages incurred from the use of such information in whole or in part.