# **Johnson Matthey Metal Joining**

# **Aluminium Brazing Products**



# **Alu-flo™ HT Brazing Alloy**

Alu-flo™ HT is an Aluminium-Silicon brazing alloy primarily used for joining aluminium alloys. It is the standard alloy for most aluminium brazing applications and is extensively used for joining aluminium automotive components. Alu-flo HT has a short melting range and exhibits good alloy flow and penetration. This alloy is ideal for joining tight joint gaps however when joint gaps are larger Alu-flo MT should be considered. The short melting range ensures that time at brazing temperature and potential for parent metal-brazing alloy diffusion is reduced. Alu-flo HT exhibits good corrosion resistance. To optimise corrosion resistance the various components of the brazed assembly should be of the same alloy.

**Conforms to:** EN1045 Classification: Type FL20

Working range: 575-650°C

#### **Uses for This Product**

The flux is used for brazing of aluminium components with aluminium silicon brazing filler metals. Typically it is used in the automotive industry, aerospace and defence industries, for cooking utensils etc.

Alu-flo™ No.2 Flux Paste is not suitable for brazing aluminium alloys that contain magnesium above approximately 0.5% as wetting and bonding of the brazing filler metal becomes impaired above this level.

#### **Conditions for Use**

The flux paste should be mixed to a small amount liquid detergent to act as a wetting agent / surfactant. The consistency of the paste produce is application / personal preference dependent, but typically ranges from a single to a double cream consistency. The flux paste should be brushed onto the joint surfaces of the components prior to assembly of the joint, more flux being applied to the mouth of the joint externally and over any brazing filler metal preforms (rings) preplaced on the joint.

Furnace brazing under the protection of an inert gas (Nitrogen / CAB Brazing), induction heating and flame heating can be used with this flux in conjunction with aluminium-silicon (7-12%) based filler metals. Brazing temperature is typically between 600°C and 615°C.

Use with fume extraction. Refer to the safety data sheet before use.

#### Flux Residue Removal

Alu-Flo™ No.2 Flux Paste leaves non corrosive residues after brazing, which are intended to be left on the component as they removal is extremely difficult.

### **Product Availability**

Telephone: +44 (0) 1763 253200

Standard packaging: 500g pots - other packaging on request.

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