

# Technical Datasheet



## Future

### Product Name:

Future 315 Low Residue No Clean Flux

### Manufactured By:

Warton Metals Ltd.

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### Description

**Future 315 Low Residue No Clean, Flux** is a 2% solids colophony free and halide free flux suitable for most no clean professional soldering applications. Future not only improves soldering performance (no bridges or icicles) but also reduces costs as cleaning is not necessary. Future 315 Low Residue No Clean Flux offers excellent solderability with the minimal level of flux residue. Future 315 Low Residue No Clean is suitable for spray or foam fluxing systems.

### Physical Properties

|                               |            |
|-------------------------------|------------|
| Solids content.....           | 2%.        |
| Specific gravity at 20 C..... | 0.805 0.05 |
| Halide content.....           | :zero.     |
| Colophony content.....        | :zero.     |
| Volatiles.....                | :98%.      |

### Typical Uses

**Future 315 Low Residue No Clean Flux** is suitable for conventional, mixed and surface mount technologies. For telecommunications, computer and general consumer electronics.

### Application and Maintenance

**Before Use.** Read all material safety information. Flux previously used must be thoroughly cleaned out of the system - as small amounts can upset the performance of **Warton Future**. Carriers, pallets and fingers must be cleaned.

**Foam Fluxing Systems.** At night and at weekends the flux should be removed from the machine and stored in

a closed container. The air stone should be left soaking in **Warton Thinners 2000** and changed before the quality of foam deteriorates. It is advisable to use a new stone when replacing rosin type fluxes. A programme for the regular replacement of the flux should be established to prevent the accumulation of contamination within the flux. The recommended run-time of a low solids flux is 40 hours.

**Flux Control.** Specific Gravity of **Future 315** is 0.805 typical.

**Spray Systems.** **Future 315** is suitable and enhanced by the use of a total loss spray system.

**Air Knives (foaming systems).** The air knife should be angled 5-12° away from the foam wave, removing excess flux without destroying the foam head. (**spray systems**). Ideally an air knife should be fitted even when using a spray system thus preventing insufficient capillary action when soldering. Spray system air knives are normally angled slightly towards the system. Excessive white deposits on the top side of the board are usually due to excess flux application. This can be reduced by the air knife angle, air volume and pressure.

**Track Speed.** The ideal track speed depends on the preheats, the type of board. A speed of between 1.2 - 1.8 metres per minute will suit most applications.

**Preheat.** A topside temperature of between 80 C and 110 C is recommended.

**Solder Temperature.** A solder temperature between 230 C and 250 C can be used.

**Wave Height.** The correct set up is achieved by balancing the pot height, pump speed and the back of the wave former. They should give the depth of the wave required and the flow. Adjustment of the back plate may be difficult to adjust on a poorly maintained bath. Care must be taken to ensure the back plate is level when the adjustment is completed.

### Thinners

**Warton Metals Ltd** recommend **Thinners 2000** should be used with **Future 315** to ensure optimum performance and consistency.

### Packaging

**Warton Future 315** and **Warton Thinners 1000** are supplied in 10 litre and 25 litre containers and flux pens.