

# Warton

WARTON METALS LIMITED

---

## Product Summary

---

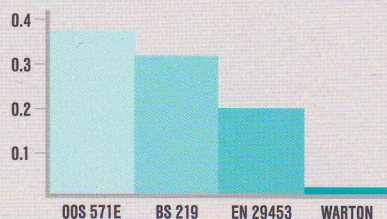


[www.warton-metals.co.uk](http://www.warton-metals.co.uk)



## High Purity™ SOLDER ALLOYS

Our High Purity Solder Alloys are manufactured in the UK using premium quality raw materials. Warton manufacture all alloys in accordance with: EN 29453, DIN 1707, BS 219, QQS 571E, or to the customer's own specification.



The diagram opposite compares the impurity levels permitted by Warton and the impurities allowed for, in the current international specifications.

### High Purity Solder Alloys include:-

- Bar Solder (0.5Kg, 1Kg and 5Kg)
- Tinmans (0.25Kg)
- Blowpipe (60g)
- Pellets (5Kg Bags)
- Solid Solder Wire
- Cored Solder Wire
- Lead Free Solder Wire
- Solder Paste

#### • High Purity Bar Solder

Warton High Purity Bar Solder is manufactured to minimise dross creation during use, with fewer bridges, skips and dry joints. High Purity Bar Solder allows an increased number of solder joints per bar and an improved wetting capability. Bar Solder is available in lead based and lead free alloys.

#### • High Purity Solid Solder Wire

Available in all Warton High Purity Solder Alloys and in gauges ranging from 10swg (3.25mm) to 32swg (0.274mm) Reel sizes including 0.25Kg, 0.5Kg, 2.5Kg, 10Kg and 25Kg.



## Cored Solder Wire

#### • AutoSol High Speed Cored Solder Wire

A range of rosin (colophony) based, halide activated cored solder wires in no clean ROL1 and ROM1 formulations. Autosol offers the greatest performance required by high speed soldering applications of both automated and manual operations. Autosol exhibits the absolute minimum of clear, post soldering residue. Autosol is easily cleaned with solvent or saponifier cleaning processes, leaving bright (no white residue) solder joints.

Autosol

Lead Free Alloys Available

#### • Omega Rosin (colophony) Free Cored Solder Wire

A rosin (colophony) free cored solder wire which contains no rosin/resin acids, pine oil or other naturally occurring derivatives from pine trees and has been specifically designed to help reduce the number of world wide cases of industrial asthma, related to rosin usage within a cored solder wire.



#### • Hardcore No Clean Cored Solder Wire

A rosin (colophony) based, halide free fast flowing no clean solder wire, for applications requiring the greater post soldering residue reliability. Warton halide free technology is the telecommunications industry accepted, no clean option.

#### • Future No Clean Cored Solder Wire

A modified rosin (colophony) based halide free, no clean cored solder wire. Future utilises the Warton halide free technology, offering equivalent performance and post soldering residue as Hardcore, with the added benefit of a clear post soldering residue.

#### • Hydro Flux Water Wash Cored Solder Wire

Hydro flux is a colophony free water washable cored solder wire. Hydro Flux exhibits minimum fuming during use and the absolute minimum ionic contamination after cleaning.

#### • Activ8 Acid Cored Solder Wire

An acid cored solder wire for metal fabrication. Activ8 is particularly suited for use on stainless steel and other hard to solder metals.

### Cored Solder Wires include:-

- AutoSol High Speed
- Omega Rosin Free
- Hardcore No Clean
- Future Clear Residue
- Hydro Flux Water Wash
- Activ8 Acid Cored

Availability: 0.25Kg, 0.5Kg, 2.5Kg, 3Kg, 10Kg and 25Kg reels.



Lead Free Alloys Available



**Fluxes & Thinners include:-**

- Ecowave Low Residue No Clean
- Future Low Residue, No Clean
- Hardcore No Clean
- Hydro Flux Water Wash
- Dipping Fluxes
- Thinners

Availability: 1L, 5L, 10L, 25L, 205L containers.



- *Ecowave No Clean Soldering Flux*

A range of low solids no clean fluxes including: VOC free, low VOC content, alcohol and low rosin content flux formulations. Warton VOC Free technology offers maximum performance on conventional Sn63 (63/37) and lead free alloys, including Sn96 and Warton lead free TSC alloy (Sn/Ag/Cu) - allowing ease of technology change. Ecovave VOC Free exhibits, no solder balling, skips or bridging, even with a top-side board temperature (pre-heat) as low as 80°C (176°F).

- *Future Low Residue Halide Free Clean Flux*

A range of colophony and Halide Free, low solids content, no clean flux formulations for air/nitrogen applications. Future exhibits a low temperature (80 - 100°C) and no residue activity system, ensuring superior solderability, with exceptional cleanliness.

- *Hardcore No Clean Non Corrosive Flux*

A rosin based range of no clean fluxes available in varying solids contents (3% - 35%) with rosin activated and halide free formulations suitable for conventional and dual wave SMT manufacturing processes.

- *Hydro Flux Water Wash Flux*

Hydro Flux is a colophony free range of water wash fluxes available in organic activated and halide free formulations.

- *Dipping Fluxes*

A range of high solids fluxes for transformer and cable manufacturing. Dipping fluxes are available as rosin based, no clean, water soluble, halide activated and halide free flux formulations.



Lead Free Ready Technology

**Solder Pastes include:-**

- Microprint Slump Free, No Clean
- Water Wash Solder Paste

Availability: tubs, cartridges, syringes, pro-flow and paste puck systems.



- *Microprint No Clean Solder Paste*

A range of no clean solder paste that offers increased print deposition on all pad sizes including 0.3mm µMBGA. Microprint includes 15-32 µm (-450 + 635) and 25-45 µm (-325 +500) particle size. Microprint formulations include Sn62, Sn63, Lead Free Sn96 and Wartons Lead Free TSC alloy (Sn/Ag/Cu) for both nitrogen and air reflow applications. With no slump and elimination of micro balling and solder balling, Microprint offers the absolute minimum of post soldering reliable residues. Microprints stability offers extended print life of over 24 hours and additional tack life of greater than 72 hours. Microprint offers independent test reports for no clean status (J-STD-004) - tested by Trace Laboratories.

- *Hydro Flux Water Wash Solder Paste*

A range of colophony free solder pastes suitable for applications where washing is necessary.



Lead Free Alloys Available

# Flux & Thinners

# Solder Paste

**order online**  
**[www.warton-metals.co.uk](http://www.warton-metals.co.uk)**



# Cleaners

## ● Total Clean

The Total Clean range of electronic assembly cleaning materials offer easy solutions for most cleaning requirements. Products include: a bench-top residue remover, stencil wipes, stencil cleaner and staged cleaning plants (ultrasonic and spray under immersion) solutions.

# Products & Services

## ● Solrist Temporary Resist

A specially developed resist for the temporary masking of PCB'S prior to wave soldering. Solrist is available as a conventional latex compound or ammonia free synthetic compound. Supplied in 250cc bottles.

## ● Kapton Tape & Dots

A range of high temperature adhesive tapes and dots in all diameters. Tapes are supplied on 33 metre rolls.

## ● Silver Brazing Alloys

Alloys for the brazing of a wide range of ferrous and non-ferrous materials.

## ● De-Solder Wicks

No clean de-solder wicks for the removal of soldered joints.

## ● Soldering Iron Tip Tinner

Available in Sn62, Sn63 and Lead Free 96S for easy re-tinning of soldering iron tips.

## ● Titration Kit

Titration kits offer accurate control of the majority of Warton fluxes and are easy to use within the production environment.

## ● Flux Pens

A range of flux pens containing rosin based and VOC free fluxes.

## ● Rework Gel

A homogenous flux gel widely used for rework of SMT/BGA devices.

This is by no means a definitive description of the products and services Warton offer. If you have a particular requirement for a product, or would like samples, further literature or advice, please do not hesitate to contact Sales & Technical Enquiries.

# The Company

Since its founding in 1979, Warton has gained an enviable reputation for its range of innovative products and services designed to meet the changing demands of both industry and the environment.

Warton respond to many enquiries and appreciate every user of solder has an individual requirement of a product to suit their company. Warton's technical customer services will spend the extra time to ensure you are happy with all aspects of our products and services.



This data is based on information believed to be reliable, and is offered in good faith. Warton Metals Ltd. makes no warranties, either express or implied, as to its accuracy, and assumes no liability arising out of Warton Metals control.

The prospective user should determine the suitability of the product before using it. Warton Metals warrants only that the product will conform to its physical descriptions. Warton Metals makes no other warranties express or implied, and expressly disclaims any implied warranty or fitness for a particular purpose. In no event shall Warton Metals be responsible for special, incidental or consequential damages, whether the claim is in contract, negligence or otherwise.

## Cleaners include:-

- Stencil Wipes
- Aerosol Bench-Top Flux Residue Remover
- Stencil Cleaner
- Saponifier + Concentrate



## Services include:-

- Full telephone / on-site technical support
- Free Certificates of Conformity
- Free Dross containers
- Dross collection - Duty of Care documentation
- Profiling service for Flow Soldering & Ovens
- NAMAS approved Analytical service
- Flow Soldering emptying and Cleaning
- Custom Flux, Paste, Wire and Alloy design

## Manufactured By:

Warton Metals Ltd  
Grove Mill Commerce Street.  
Haslingden, Lancashire, BB4 5JT, UK

Telephone: +44(0) 1706 218888

Fax: +44(0) 1706 221188

email: sales@warton-metals.co.uk

web: www.warton-metals.co.uk



Certificate number 1711/98



For more information call our technical department today

**01706 218888**

## Distributed By:

