



# Ensitech Fluid Application Note 95 TB-95 Etching Fluid for Stainless Steel

## **PURPOSE**

Adding a permanent etch to your work or infrastructure gives a range of benefits including safety instruction, security identification and aesthetic improvement with logos etc. Stainless steel is an extremely hard material that is difficult to engrave via traditional methods. The TIG Brush Etching process is unequalled in speed, ease and permanency in adding an etch to stainless steel.

### **BACKGROUND**

TB-95 is a unique chemical developed for use with the TIG Brush that quickly acts on all grades of stainless steel to provide a sharp clear etch when used with a heat resistant stencil provided by your Ensitech representative.

### **CHEMISTRY**

<u>PERFORMANCE</u>: TB-95 Etch Fluid for Stainless Steel is a water-based formulation that acts fast. The chemistry is a purpose made combination of salts in water and the latest technology in environmentally friendly surfactants.

<u>SAFETY</u>: All Ensitech products are developed to maximise worker safety. TB-95 is designated a corrosive which is managed by simple PPE such as nitrile gloves and safety glasses. The method of etching is quite passive and does not generate a significant amount of fumes or splatter. Ensitech Material Data Sheets (SDS) are created by the most reputable chemical safety organisation in Australia and should be consulted and well understood before using any Ensitech chemical.

ENVIRONMENT: All ingredients are environmentally safe with either no environmental impact or biodegradable and the breakdown products also have no detrimental impact on the terrestrial or aquatic environments. TB-95 is acidic and can be easily neutralised if significant quantities are needed to be disposed of.









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### **APPLICATION**

Please consult the SDS before use and wear PPE as directed.

After cleaning the surface of the stainless steel work with the TIG Brush, rinse the cleaned surface with water.

- 1. Attach the earth clamp to your work piece (stainless to be etched)
- 2. Attached the marking/etching head adaptor to the carbon marking head.
- 3. Screw the marking head in to the wand handle.
- 4. Apply 2 inch of the heatproof felt with the hard side facing to the marking head using the rubber o'ring supplied.
- 5. Set the power dial to the "Multi Brush" setting (for TBE-250 models set power dial to "half power" setting).
- 6. Set the mode dial to "Etch/Polish" mode.
- 7. Dip the electrode with the felt in to the TB-95 Stainless Steel Etching Fluid ensuring that the felt is fully wet.
- 8. Place the stencil on to the stainless to be etched, securing it to the stainless with masking tape, ensuring a tight flat application.
- 9. Place the TIG Brush marking/etching head attached) on to the stencil, using slight pressure and running over the entire printable surface for no longer than 20 seconds.
- 10. The felt can only be used once as the etched metal is contained by the felt.
- 11. Remove the stencil and wipe the etched area clean with Ensitech TB-50 Finishing Fluid or with soapy water.
- 12. Clean the stencil with soapy water and rinse thoroughly with water.
- 13. Lay flat to dry and store flat until next use.

## **DISPOSAL**

TB-95 can be disposed to your council provided wastewater system via your sewer system without harm to the system or environment with water dilution. Significant amounts of TB-95 will need to be neutralized before disposal to sewer. Please consult with your Ensitech representative.

