TIG WELDING TORCHES

SECTION 1

Manufacturers Name: Parweld Limited

Contact: t: +44 1299 266800 f: +44 1299 266900

e-mail; info@ parweld.co.uk

Address: Bewdley Business Park

Long Bank Bewdley DY12 2UJ

Website Address: <u>www.parweld.com</u>

Trade Name: TIG – Tungsten Inert Gas Welding Torches

SECTION 2 - GASES

The **toxicity of gases** produced when TIG Welding is dependent on the base metal, filler wire and preparation of the work piece.

- a) Metal filler wire hazardous ingredients. Consult your filler metal supplier for details.
- b) **Preparation of Workpiece** Cleaning agents, for example trichlorethylene, left on the workpiece will produce Phosgene gas which is harmful to the respiratory system.

SECTION 3 – ELECTRIC SHOCK

Welding power units can have an Open Circuit Voltage (O.V.C.) above 80 volts.

The TIG Torch is fully insulated and durable under normal working conditions, because of the nature of the process regular inspection of the torch is advisable to ensure all insulated parts are sound, free from cracks, deterioration and water leaks.

Any damaged insulation should immediately be repaired or replaced.

SECTION 4 – WATER COOLING

Always ensure that the water circuit is unrestricted and free from leaks with a minimum flow rate of 1.2 lts/min.

SECTION 5 - ARC LIGHT

The TIG process emits large amounts of harmful ultra-violet rays, total skin protection for the welder is essential.

Eye protection is required as specified in BS679, filters remove the harmful rays and are made in shade numbers, 3 to 18, the higher the number, the darker the filter.

SECTION 6 - FIRE AND EXPLOSION

TIG torches must never be placed on hot work surfaces as this might cause meltdown of vulnerable parts such as the handle and power cables.

In cases of fire use only a Dry Power Fire Extinguisher (Usually coloured Blue).

SECTION 7 – PROTECTIVE CLOTHING

Gloves The TIG process usually requires a more delicate touch and the thin flexible leather gauntlet is more preferable

Safety Boots Made to BS1870, with heat and oil-resistant soles

Protective overalls or boilersuit needs to be from a solidly woven material that does not catch fire easily from spatter. The colour white should not be used because of arc light reflection, dark green or blue are the most preferable.

Caps for protection from spatter and dust fit under the headband of the helmet and often worn with the peak covering the back of the neck.

Further information on safe working practices can be found in the Tig Installation and Operations manual on www.parweld.com

Information on, Tig and Welding processes can be found in the Process Synopsis manual on www.parweld.com