

**TEFLON™ BONDED SILICONE - TECHNICAL DATA SHEET**

# United Silicone Teflon™ Bonded Silicone

*Heat Seal Solutions for Today's Packaging Challenges*



United Silicone Teflon™ (PTFE) bonded silicone is engineered to provide an alternative to wrapping silicone heat seal tooling with Teflon™ tape. Designed to be more robust – it lasts 10x longer in production, significantly reducing changeover and maintenance time while enhancing seal integrity.

With an excellent Teflon-to-silicone bond, this product provides effective solutions for sealing package inconsistencies caused by food contamination, thick or multiple layers of film, product dust or fine particles.



*Teflon™ bonded silicone heat seal tool (left)*

*Teflon™ tape wrapped heat seal tool (right)*

**United Silicone Advantages:**

- Eliminates the need for Teflon™ tape
- Reduces the time required for changeovers and maintenance
- Enhances seal integrity which helps reduce leakers
- Increases resistance to product contamination for lower scrap rates
- Improves heat transfer for shorter, hotter heat seal cycles

**PROPERTIES OF SILICONE RUBBER FORMULATIONS\***

FORMULATION	DUROMETER (SHORE A)	TENSILE STRENGTH (PSI)	COMPRESSION SET (%)	HEAT RESISTANCE	SPECIFIC GRAVITY
USI Teflon Bonded Silicone	60	646	9	500°F (260°C)	1.71
Thermosil (brown)	60	980	6	600°F (315°C)	1.63
FDA - 3A (red)	60	1354	6	500°F (260°C)	1.17

*\*additional formulations and durometers are available*

- Durometer** – The hardness of a material as measured on the Shore A Scale
- Tensile Strength** – The pulling stress just before the material breaks into two pieces
- Compression Set** – The measure of material resiliency after being subjected to compression and heat
- Heat Resistance** – Ability of a material to remain bonded to metal during exposure to extreme temperature
- Specific Gravity** – The density of material divided by that of water

“USI’s Teflon bonded silicone remained in perfect condition after 6 weeks of trials...we would like to continue to expand and use this product on our other manufacturing lines.”

- Major Food Corporation