

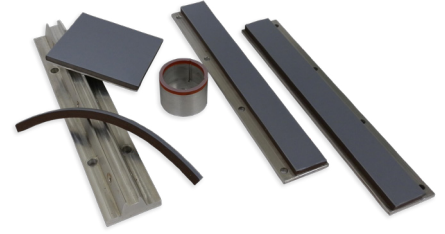
TEFLON™ BONDED SILICONE - TECHNICAL DATA SHEET

United Silicone Teflon™ Bonded Silicone

Heat Seal Solutions for Today's Packaging Challenges

United Silicone Teflon™ (PTFE) direct 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	Duro (Shore A)	Tensile Strength (PSI)	Compression Set (%)	Heat Resistance	Specific Gravity
Ultrasil (Red)	60	646	9	500°F (260°C)	1.71
Thermosil (Brown)	60	1030	20	600°F (315°C)	1.63
FDA-3A (red)	60	1050	18	500°F (260°C)	1.17

*additional formulations and durometers 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

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