

ENABLE LONG-TERM PERFORMANCE WITH TPEs FOR FASTENERS AND CLIPS



The average length of vehicle ownership is on the rise, placing greater demands on all elastomeric materials to maintain long-term sealing performance in fasteners and clips. OnFlex™ TPEs provide a tight seal over these lengthier time frames—even at elevated temperatures—and reduce vibration and noise. Why? Because they feature low compression set, good stress relaxation, and chemical compatibility with common substrates.

	ONFLEX™ HT	ONFLEX™ AF 7210	ONFLEX™ S KA	ONFLEX™ S KG
Applications	Fasteners/ Clips	Fasteners/ Clips	Fasteners/ Clips	Fasteners/ Clips
Defining Characteristic	High temperature sealing performance	Ambient temperature sealing performance	High temperature sealing performance	Ambient temperature sealing performance
Density	1.00 g/ml	0.99 g/ml	1.10 g/ml	1.13 g/ml
Physical Properties				
Tensile Strength	6.0-10.0 MPa	5.0-11.5 MPa	3.0-7.5 MPa	2.6-4.9 MPa
Tear Resistance	25.0-37.0 kN/m	21.0-43.0 kN/m	17.0-46.0 kN/m	16.0-29.0 kN/m
Compression Set				
73°F (23°C) 72hrs	12-27%	16-32%	13-23%	31-35%
158°F (70°C) 22hrs	28-44%	32-43%	29-38%	62-66%
212°F (100°C) 22hrs	45-53%	56-60%	54-57%	80-85%
Hardness	40-80 Shore A	40-80 Shore A	40-80 Shore A	40-80 Shore A
Overmolding Substrate	Polypropylene/ Polyethylene	Polypropylene	Polyamide	Polyamide
Processing	Injection Molding/ Extrusion	Injection Molding/ Extrusion	Injection Molding/ Extrusion	Injection Molding/ Extrusion



HOW GLS TPES MAKE THE DIFFERENCE IN AUTOMOTIVE FASTENERS AND CLIPS

- **Low compression set** - coupled with good stress relaxation, our automotive TPES are designed to maintain a good seal over time and reduce noise generated by vibration
- **High temperature performance** - PolyOne automotive TPES provide good sealing performance in temperatures up to 100°C/212°F
- **Bonding performance** - strong chemical bond to polypropylene, polyethylene, and polyamide
- **Process flexibility** - grades can be both injection molded and extruded
- **Easy to color** - can be colored at the machine
- **Reduced production steps** - some grades do not require pre-drying
- **Low VOC/FOG** - OnFlex HT™ has been externally tested to VDA 278 and is proven to help satisfy vehicle interior air quality (VIAQ) regulatory requirements
- **Single source supply** - we can streamline your supply chain with the ability to provide polymer colorants, engineered thermoplastics, and thermoplastic elastomers from a single source
- **Global support** - we provide production, technical, and commercial support in locations convenient to your operations, including North America, Europe, and Asia

To learn more about GLS TPES for automotive applications, contact PolyOne at +1.866.POLYONE (+1.866.765.9663).

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