



# NSF/ANSI 61 Materials

## EXTENDED RANGE OF APPROVED MATERIALS



## Meeting the demands for approved materials for the potable water and sanitary market

Demonstrating its commitment to the sanitary and potable water industry, Trelleborg Sealing Solutions has extended its range of NSF/ANSI 61 approved materials for demanding applications.

In response to growing demands for NSF 61 certified materials, we have worked to develop a wide range of materials for the potable water and sanitary market. These materials are available in a variety of different products ranging from O-Rings and gaskets, to diaphragms and custom shapes.

As a global manufacturer of static and dynamic sealing products, Trelleborg Sealing Solutions strives to stay ahead of the different standards across the world. Endorsed by the FDA, NSF/ANSI 61 offers customers confidence in the safety of products for use in contact with drinking water.

### Application Examples

- Faucets
- Fixtures
- Filtration
- Pumps
- Valves
- Fittings
- Appliances
- Water Heaters

### Range of Materials

#### EPDM

Ethylene Propylene Diene Rubber (EPDM) polymers are fully saturated, non-polar hydrocarbon-based elastomers. Their polymer geometry gives them superior compatibility with polar fluids and polar solvents at elevated temperatures. The materials have high chemical resistance, giving long life in polar solvents, hot water and steam. In addition, they are suitable for contact with alkaline cleaning fluids.

#### NBR

Acrylonitrile-Butadiene Rubber (NBR) is a good choice for applications where seals will not be exposed to harsh cleaning regimes, ozone or superheated steam. These materials are copolymers of butadiene and acrylonitrile. The percentage of NBR and HNBR in their formulations determines the materials' performance characteristics.

#### Silicone

Silicone is an extremely versatile material that lends itself to a broad range of application conditions. As a liquid raw material, silicone offers advantages in processing that render it a premier choice of material for technical components where long-term consistency of precision, quality and performance is key.

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### Features and benefits of Trelleborg Sealing Solutions offering for the sanitary and potable water market

- Meets ISO 9001 requirements
- Wide range of materials and products available for both static and dynamic applications
- Materials available for Section 6: Joining and Sealing Materials and Section 9: Mechanical Plumbing Devices
- Materials have additional global certifications such as KTW, WRAS and ACS
- Colored Flexcoat™ FF treatments for seals offer improved visual identity
- Products globally available through Trelleborg Sealing Solutions logistics network

### Highlight: Liquid Silicone Rubber (LSR)

LSR gives our customers the ability to develop custom solutions and complex shapes that may not be possible with other materials. Trelleborg works closely with all leading liquid silicone materials suppliers to identify the best material solution for specific customer application, including selecting compounds that will meet NSF/ANSI 61 certification criteria.

### Baseline Compounds

Type	Durometer	Code	Description
Ethylene Propylene Diene Monomer (EPDM)	60 - 80	E6W01 XL057 XL061 XL062 E7H17 E8W02	A range of materials with differing durometers for use in O-Rings and Engineered Molded Parts. Function as a range of standard materials for basic potable water applications.
Nitrile Butadiene Rubber (NBR)	60 - 80	N7W05 XL060	

### High Performance Compounds

Type	Durometer	Code	Description
Ethylene Propylene Diene Monomer (EPDM)	60	E6W01	High elongation and tear resistance for molding complex shapes.
		E7Y30	Internally lubricated with excellent performance and resistance to chlorine and chloramine. Designed with automated assembly in mind.
	70	E7518	Excellent resistance to chlorine and certified to many global water standards.
		E7W07	Optimum chlorine/chloramine resistance and compliant to many global water standards.
		XL058	Broad operating temperature range for cold and hot water applications.
Nitrile Butadiene Rubber (NBR)	60	XL059	High elongation and tear resistance for molding complex shapes.
		N6W01	High elongation and tear resistance for molding complex shapes.
	70	N7W13	NBR with excellent all-round performance.
VMQ	70	N7072	High elongation and tear resistance for molding complex shapes.
		S7W03	FDA compliant with rust coloring for differentiation and visibility.