



www.durlon.com info@durlon.com

SEALING SOLUTIONS FOR **OEM Services** 

# We Succeed When you Succeed.

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# Our Vision

Evolution isn't a choice in today's business landscape, it's the only way to succeed.

Progress relies on everything moving forward; from people to machinery to production. Everything must flow.

As we engineer our way to a better world, we are breaking down barriers, making sure each process is in place, always reflecting and improving. We are experts at delivering the best sealing solutions to help our customers unlock their highest potential.

Our global community of industry leading specialists drive our innovative production and materials to consistently raise the bar.

Whether through the stress of everyday use, or specialized applications and hightemperature environments, liquid or gas, our products deliver sustainable integrity.

At Durlon, we succeed when you succeed.



# Sealing Solutions for **OEM Services**

#### **OEM and Customized Sealing Solutions**

Durlon® gasket technologies develops and manufactures special and custom-made sealing solutions according to customer specifications for various OEMs (Original Equipment Manufacturers) and customized applications. Our dedicated engineers will work with you to customize the design, material selection, dimensions, and performance characteristics of the gaskets to fit the equipment or product being manufactured, including thoroughly testing the component to ensure maximum reliability and safety.

Durlon® is listed as an approved material on many multinational end-user databases (AML - materials reviewed, tested, and allowed for use). With a full product range and a global manufacturing capability, we can also offer fast turnaround times no matter where in the world your site is located.

#### **OEM Industries and Custom Made-Gaskets**

The following examples list OEM equipment and industries that commonly incorporate gaskets in their mechanical components:

**Skid-Mounted Pumps** Pump casings, impellers, and flanges.

#### **Skid-Mounted Compressors**

Cylinder heads, valves, and discharge pipes.

**Skid-Mounted Heat Exchangers** Plate or tube bundles.

Skid-Mounted Filters Liquid or gas filter housings and connections.

#### Skid-Mounted Separators

Vessel connections and internal components.

**Skid-Mounted Chillers** Refrigerant lines, evaporator, and condenser.

#### **Skid-Mounted Generators**

Engine blocks, cylinder heads, and exhaust systems.

#### Skid-Mounted Valves

Valve bodies and flange connections.

#### **Oil Industry**

Drilling equipment, gas exploration, refining, transportation processes, well-completion tools, and production - pumps, valves, and control systems.

#### Wastewater Industry

Pumps, valves, filtration systems, and treatment equipment for municipal and industrial applications.

#### **Chemical Industry**

Reactors, pipelines, and storage tanks.



#### **Pulp Industry**

Pulp processing, paper making, fiber processing, and tissue production equipment - valves, pumps, digesters pipelines, and refiners.

#### **Food Industry**

Filling machines, milling systems, sorting machines, extruders, pumps, mixers, valves, packaging materials, and processing equipment.

#### **Pharmaceutical Industry**

Pumps, reactors, autoclaves, and filtration systems.

#### **Power Industry**

Gas turbines, steam turbines, wind turbines, generators, boilers, heat exchangers, pipelines, and control systems for various power plants.

#### **Mining Industry**

Engines, pumps, compressors, valves, crushers, and conveyors.

#### **Automotive Industry**

Engine components (cylinder heads, exhaust manifolds, valve covers), transmission systems, and cooling systems.

#### Aerospace Industry

Aircraft engines, fuel systems, hydraulic systems, and various structural components.

These are just a few examples of OEMs operating in the mentioned industries. OEMs in these sectors specialize in designing, manufacturing, and supplying equipment, components, and solutions that cater to the specific needs and challenges of each industry.

## Innovative products Unparalleled service

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### Durlon<sup>®</sup> Sealing Solutions

Industries rely on Original Equipment Manufacturers (OEMs) to provide specialized equipment and components tailored to their specific needs. It's important to note that the selection of gasket types depends on factors such as the operating temperature, pressure, chemical compatibility, and the specific requirements of the equipment.

Durlon®'s versatile types of gaskets are used in numerous OEM mechanical systems and play a crucial role in ensuring proper sealing, preventing leaks, and maintaining the integrity of various mechanical components across the different sectors.

#### Durlon® (CNA) compressed non-asbestos gaskets

are exclusively manufactured at Durabla Canada Ltd. These high-density products feature the most homogeneous combination of minerals, synthetic fibers, and elastomers. They are used in a wide variety of industries on a broad range of chemical applications at varying temperatures and pressures. Their excellent flexibility prevents large, narrow flange gaskets from breaking during cutting and installation, and their superior recovery ensures tight sealing during thermal cycling.

Durlon® PTFE gaskets are exclusively manufactured at Triangle Fluid Controls Ltd., and also located in Canada. Our compression molded and skived manufacturing process allows for the best control of physical properties and performance characteristics as compared with other manufacturing processes. With unique formulas of fillers, Durlon® PTFE products can meet your tough chemical applications and engineering specifications.

Durlon<sup>®</sup> metallic gaskets are manufactured from a combination of metals and designed to withstand extreme temperatures, pressures, and chemical exposure. Available in standard and custom

configurations, these rugged metal gaskets are made of a wide range of materials to accommodate all types of process applications.

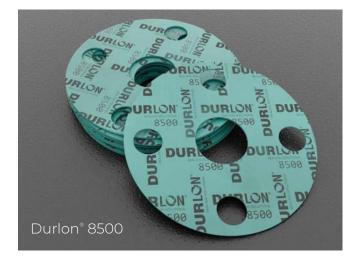
Durlon® semi-metallic gaskets include both metallic and non-metallic components, either containing a metal core with sealing materials on both flat surfaces, or a pliable core encased in a thin metallic casing. They are most popular due to this configuration and are available in a wide variety of styles and sizes. They can typically be fabricated of any metal which is available in thin strips or sheets, and which can be welded. Therefore, they can be used against virtually any corrosive medium dependent upon the choice of the metal and filler/ facing material.

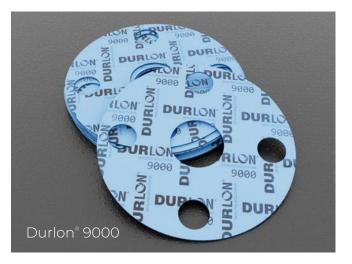
Our computer-aided manufacturing process uses rigorous quality control programs to ensure premium quality product performance. The metallic component gives the gasket superior structural integrity, while the non-metallic element ensures superior sealing.

Durlon® products are used in virtually every industrialized corner of the world. Our gasket materials are manufactured to ISO 9001 quality standards and are subjected to continuous testing and rigid quality control, ensuring unvarying performance on the job.

We recognize that today more emphasis is being placed on fugitive emissions via the Clean Air Act in Canada and the United States, as well as various regulations in other countries. One of our prime design objectives is to maximize the sealability of our gasket materials to meet and exceed fugitive emission requirements.

## Durlon<sup>®</sup> Product Recommendations











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## Physical Properties & Certifications

Physical Properties	8500	9000	SWG	Durtec®	ETG	9645
Composition	Aramid -Inorganic NBR	Inorganic Filler / Pure PTFE Resins	Spiral Wound Gasket	Specially Engineered Metal Core Technology	Extreme Temperature Gasket	Modified PTFE with rigid PTFE core
Color	Green	Blue	Style: DRI	-	SWG / Durtec®/ Kammprofile	White
Temperature: Min Max Continuous, Max	-40°C (-40°F) 371°C (700°F) 287°C (548°F)	-212°C (-350°F) 271°C (520°F) 260°C (500°F)	-	-200°C (-328°F) 1,000°C (1,832°F) 650°C (1,200°F)	> 650°C (1,200°F) up to 1,000°C (1,832°F)	-260°C (-436°F) 260°C (500°F) -
Pressure, max, bar (psi)	103 (1,500)	103 (1,500)	-	430.9 (6,250)	-	60 (870)
Density, g/cc (lbs/ft³)	1.7 (106)	2.2 (138)	-	-	-	1.3 (81)
Compressibility, %	8-16	8-16	-	-	-	>44
Recovery, %	50	40	-	-	-	>6.3
Creep Relaxation, %	20	30	-	-	-	<26
Tensile Strength, MPa (psi)	13.8 (2,000)	13.8 (2,000)	-	-	-	-
Sealability ASTM 2378 (Nitrogen)	0.03 cc/min	0.01 cc/min	-	-	-	-
pH range, Room Temperature	-	-	-	0-14	-	-

Durlon® SWG - All Durlon® SWG's are manufactured according to ASME B16.20 standards. Quality Assurance complies with API Specifications Q1 and ISO 9001 standards. Super Inhibited Graphite meets the requirements of Shell Specification MESC SPE 85/203 and meets PVRC SCR Flexible Graphite Spec for FG 600 material.

Durlon® ETG adds an inner and outer protection boundary in the form of a mica-phyllosilicate based sealing material - Durlon® HT1000® : consists of phlogopite mica paper impregnated with an inorganic binder at less than half the binder amount found in a typical vermiculite-phyllosilicate filled product. This lower binder content allows for superior weight retention and results in ultimate extreme temperature sealing performance. Durlon® Durtec® - Physical Properties: dependent on facing material and metallurgy of core, data shown above is for Inconel® 625 core and HT1000® covering layers.

Durlon® Kammprofile\* - Max temperature is dependent on material used.

Style	Certifications
8500	California Proposition 65 and RoHS Reach Declaration compliant, API 6FB Fire Test with avg. temperature >650°C, 30 minutes, 40 bar, 1 ml (inch/min.) max allowable leakage, Conforms to the FDA requirements of 21 CFR 177.2600, ABS Tier2 - PDA Issued.
9000	Passed API 6FA, 3rd Edition Fire Test, Met requirements of 121°C (250°F) for USP for Plastic Class VI, Conforms to required 21 CFR 177.1550 for FDA, TA-luft (VDI Guideline 2440) approved material, ABS-PDA & Pamphlet 95 approved material - chlorine institute, (EC) 1935/2004 & EU (10/2011) approved material.
SWG	TA-luft (VDI Guideline 2440), API Standard 6FB Fire Test- 6 inch Class 300 SWG FG.
Durtec®	Passed modified API 607 fire test and meets the requirements of Shell Specification MESC SPE 85/203 & PVRC SCR Flexible Graphite Specification for FG 600 material, RoHS Reach Declaration compliant.
ETG	API 6FB, Fourth Edition 2019,Type 1 (Onshore Test), API 6FB, Fourth Edition 2019,Type 2 (Offshore Test), API 607, 4th edition Fire Test with Exxon modifications.
9645	Conforms to FDA requirements of 21 CFR 177.1550 for food and drug contact, TA-luft (VDI Guideline 2440) approved material.

Note: ASTM properties are based on 1/16" sheet thickness, except ASTM F38 which is based on 1/32" sheet thickness. This is a general guide only and should not be the sole means of accepting or rejecting this material. The data listed here falls within the normal range of product properties, but should not be used to establish specifications limits nor used alone as the basis of design. For applications above Class 300, contact our technical department.

Warning: Durlon® gasket materials should never be recommended when both temperature and pressure are at the maximum listed. Properties and applications stated are typical. No applications should be undertaken by anyone without independent study and evaluation for suitability. Never use more than one gasket in one flange joint and never reuse a gasket. Improper use or gasket selection could cause property damage and/or serious injury. Data reported is a compilation of field testing, field service reports and/or in-house testing. While the utmost care has gone into publishing the information contained herein, we assume no responsibility for errors. Specifications and information contained within are subject to change without notice. This edition cancels and obsoletes all previous editions.



The core of the Durlon<sup>®</sup> brand is to provide fluid sealing solutions that make sense, both financially and strategically. We accomplish this through process-oriented design, sector-specific knowledge, and extensive testing. Our goal is to ensure performance and safety while adhering to the quality management system registered to ISO 9001:2015.

At Durlon, we offer specially developed sealing solutions tailored directly to your specific needs.



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