



# DONIFLON® 900E










A multi directional expanded PTFE material with superior chemical resistance to nearly all media with the exception of molten alkali metals and fluorine compounds. DONIFLON® 900E is recommended for the pharmaceutical and food industries. Its excellent compressibility enables very good adaptability to pressure sensitive connections like ceramic-, glass-, or plastic-lined piping or uneven flanges.

## PROPERTIES

	MECHANICAL RESISTANCE	THERMAL RESISTANCE	SEALABILITY PERFORMANCE	CHEMICAL RESISTANCE
SUPERIOR			■	■
EXCELLENT			■	■
VERY GOOD	■		■	■
GOOD	■	■	■	■
MODERATE	■	■	■	■

## APPROPRIATE INDUSTRIES & APPLICATIONS

-  POTABLE WATER SUPPLY
-  REFRIGERATION AND COOLING
-  CHEMICAL INDUSTRY
-  COMPRESSORS AND PUMPS
-  PETROCHEMICAL INDUSTRY
-  VALVES
-  PHARMACEUTICAL INDUSTRY
-  FOOD INDUSTRY

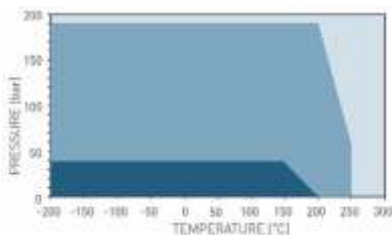
Composition	PTFE
Color	White
Approvals	Please inquire.

## TECHNICAL DATA Typical values for a thickness of 2 mm

<b>Density</b>	DIN 28090-2	g/cm <sup>3</sup>	0.8
<b>Compressibility</b>	ASTM F36J	%	55
<b>Recovery</b>	ASTM F36J	%	12
<b>Tensile strength</b>	ASTM F152	MPa	32
<b>Stress resistance</b>	DIN 52913		
30 MPa, 16 h, 150 °C		MPa	16
<b>Specific leak rate</b>	DIN 3535-6	mg/(s·m)	0.002
<b>pH range</b>			0-14
<b>Operating conditions</b>			
Minimum temperature		°C/°F	-200/-328
Maximum temperature		°C/°F	260/500
Pressure		bar/psi	100/1450

## P-T DIAGRAM

EN 1514-1, Type IBC, PN 40, DIN 28091-2 / 3,8, 2,0 mm



- General suitability - Under common installation practices and chemical compatibility.
- Conditional suitability - Appropriate measures ensure maximum performance for joint design and gasket installation. Technical consultation is recommended.
- Limited suitability - Technical consultation is mandatory.

**P-T diagrams** indicate the maximum permissible combination of internal pressure and service temperature which can be simultaneously applied for a given gasket according its material type, thickness, size and tightness class. Given the wide variety of gasket applications and service conditions, these values should only be regarded as guidance for the proper gasket assembly. In general, thinner gaskets exhibit better P-T properties.

Standard dimension of sheets

Size (mm): 1500 x 1500  
 Thickness (mm): 0.5 | 1.0 | 1.5 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0  
 Other sizes and thicknesses available on request.

Acetamide	+	Dioxane	+	Oleic acid	+
Acetic acid, 10%	+	Diphyl (Dowtherm A)	+	Oleum (Sulfuric acid, fuming)	+
Acetic acid, 100% (Glacial)	+	Esters	+	Oxalic acid	+
Acetone	+	Ethane (gas)	+	Oxygen (gas)	+
Acetonitrile	+	Ethers	+	Palmitic acid	+
Acetylene (gas)	+	Ethyl acetate	+	Paraffin oil	+
Acid chlorides	+	Ethyl alcohol (Ethanol)	+	Pentane	+
Acrylic acid	+	Ethyl cellulose	+	Perchloroethylene	+
Acrylonitrile	+	Ethyl chloride (gas)	+	Petroleum (Crude oil)	+
Adipic acid	+	Ethylene (gas)	+	Phenol (Carbolic acid)	+
Air (gas)	+	Ethylene glycol	+	Phosphoric acid, 40%	+
Alcohols	+	Formaldehyde (Formalin)	+	Phosphoric acid, 85%	+
Aldehydes	+	Formamide	+	Phthalic acid	+
Alum	+	Formic acid, 10%	+	Potassium acetate	+
Aluminium acetate	+	Formic acid, 85%	+	Potassium bicarbonate	+
Aluminium chlorate	+	Formic acid, 100%	+	Potassium carbonate	+
Aluminium chloride	+	Freon-12 (R-12)	+	Potassium chloride	+
Aluminium sulfate	+	Freon-134a (R-134a)	+	Potassium cyanide	+
Amines	+	Freon-22 (R-22)	+	Potassium dichromate	?
Ammonia (gas)	+	Fruit juices	+	Potassium hydroxide	+
Ammonium bicarbonate	+	Fuel oil	+	Potassium iodide	+
Ammonium chloride	+	Gasoline	+	Potassium nitrate	+
Ammonium hydroxide	+	Gelatin	+	Potassium permanganate	+
Amyl acetate	+	Glycerine (Glycerol)	+	Propane (gas)	+
Anhydrides	+	Glycols	+	Propylene (gas)	+
Aniline	+	Helium (gas)	+	Pyridine	+
Anisole	+	Heptane	+	Salicylic acid	+
Argon (gas)	+	Hydraulic oil (Glycol based)	+	Seawater/brine	+
Asphalt	+	Hydraulic oil (Mineral type)	+	Silicones (oil/grease)	+
Barium chloride	+	Hydraulic oil (Phosphate ester based)	+	Soaps	+
Benzaldehyde	+	Hydrazine	+	Sodium aluminate	+
Benzene	+	Hydrocarbons	+	Sodium bicarbonate	+
Benzoic acid	+	Hydrochloric acid, 10%	+	Sodium bisulfite	+
Bio-diesel	+	Hydrochloric acid, 37%	+	Sodium carbonate	+
Bio-ethanol	+	Hydrofluoric acid, 10%	-	Sodium chloride	+
Black liquor	+	Hydrofluoric acid, 48%	-	Sodium cyanide	+
Borax	+	Hydrogen (gas)	+	Sodium hydroxide	+
Boric acid	+	Iron sulfate	+	Sodium hypochlorite (Bleach)	+
Butadiene (gas)	+	Isobutane (gas)	+	Sodium silicate (Water glass)	+
Butane (gas)	+	Isocetane	+	Sodium sulfate	+
Butyl alcohol (Butanol)	+	Isoprene	+	Sodium sulfide	+
Butyric acid	+	Isopropyl alcohol (Isopropanol)	+	Starch	+
Calcium chloride	+	Kerosene	+	Steam	+
Calcium hydroxide	+	Ketones	+	Stearic acid	+
Carbon dioxide (gas)	+	Lactic acid	+	Styrene	+
Carbon monoxide (gas)	+	Lead acetate	+	Sugars	+
Cellosolve	+	Lead arsenate	+	Sulfur	+
Chlorine (gas)	+	Magnesium sulfate	+	Sulfur dioxide (gas)	+
Chlorine (in water)	+	Maleic acid	+	Sulfuric acid, 20%	+
Chlorobenzene	+	Malic acid	+	Sulfuric acid, 98%	?
Chloroform	+	Methane (gas)	+	Sulfuryl chloride	?
Chloroprene	+	Methyl alcohol (Methanol)	+	Tar	+
Chlorosilanes	+	Methyl chloride (gas)	+	Tartaric acid	+
Chromic acid	+	Methylene dichloride	+	Tetrahydrofuran (THF)	+
Citric acid	+	Methyl ethyl ketone (MEK)	+	Titanium tetrachloride	+
Copper acetate	+	N-Methyl-pyrrolidone (NMP)	+	Toluene	+
Copper sulfate	+	Milk	+	2,4-Toluenediisocyanate	+
Creosote	+	Mineral oil (ASTM no.1)	+	Transformer oil (Mineral type)	+
Cresols (Cresylic acid)	+	Motor oil	+	Trichloroethylene	+
Cyclohexane	+	Naphtha	+	Vinagar	+
Cyclohexanol	+	Nitric acid, 10%	+	Vinyl chloride (gas)	+
Cyclohexanone	+	Nitric acid, 65%	+	Vinylidene chloride	+
Decalin	+	Nitrobenzene	+	Water	+
Dextrin	+	Nitrogen (gas)	+	White spirits	+
Dibenzyl ether	+	Nitrous gases (NOx)	+	Xylenes	+
Dibutyl phthalate	+	Octane	+	Xylenol	+
Dimethylacetamide [DMA]	+	Oils (Essential)	+	Zinc sulfate	+
Dimethylformamide [DMF]	+	Oils (Vegetable)	+		

## CHEMICAL RESISTANCE CHART

The recommendations made here are intended as a guideline for the selection of a suitable gasket type. As the function and durability of products is dependent upon a number of factors, the data may not be used to support any warranty claims.

- + Recommended
- ? Recommendation depends on operating conditions
- Not recommended



**DONIT TESNIT, d.o.o.**

Cesta komandanta Staneta 38  
 1215 Medvode, Slovenia

Phone: +386 (0)1 582 33 00

Fax: +386 (0)1 582 32 06

+386 (0)1 582 32 08

Web: [www.donit.eu](http://www.donit.eu)

E-mail: [info@donit.eu](mailto:info@donit.eu)

For disclaimer please visit <http://donit.eu/disclaimer/>

Copyright © DONIT TESNIT, d.o.o.

All rights reserved

Date of issue: 05.2018 / CB-05-2018-Doniflon