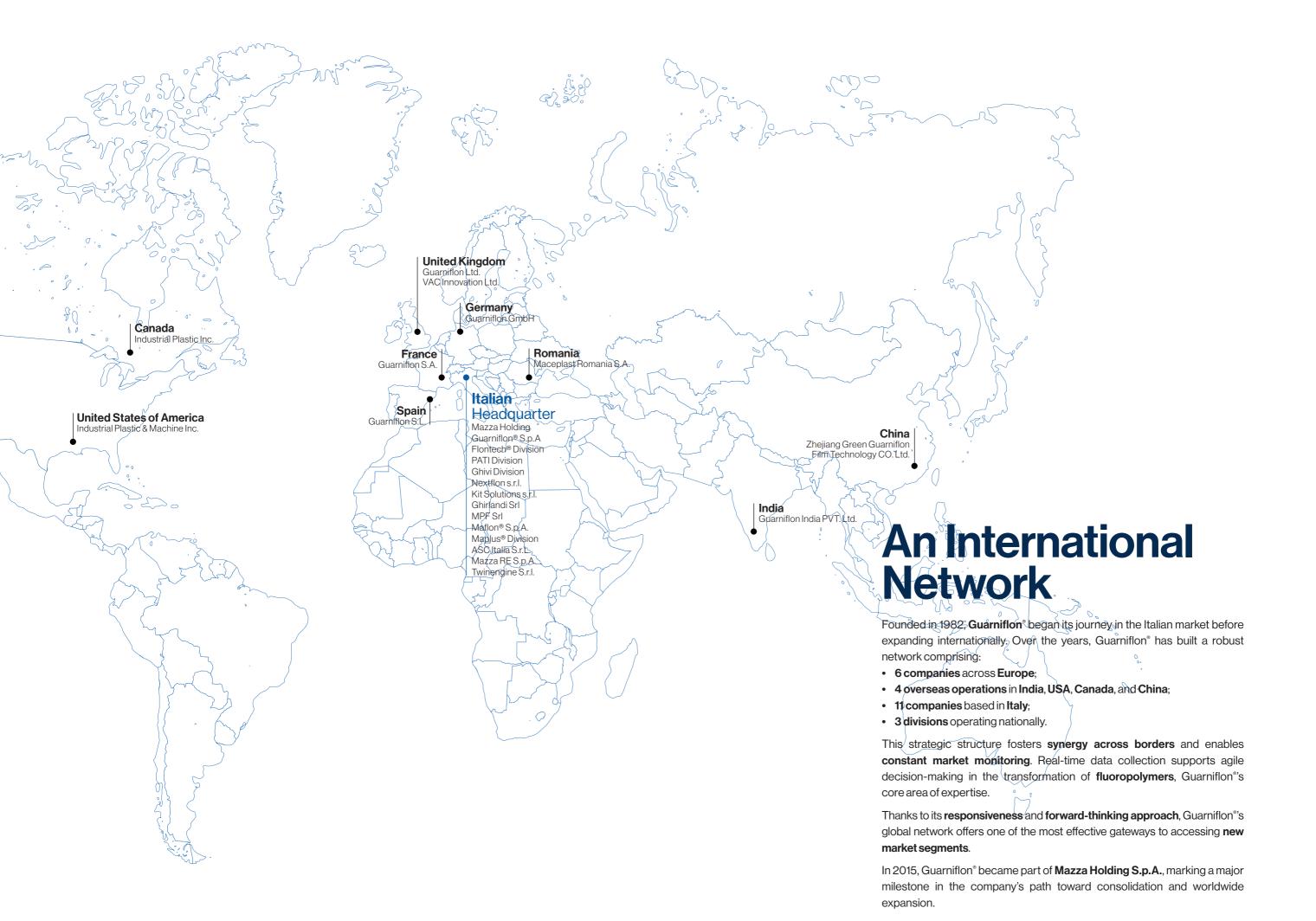
SC Series The Sealing Solution Superior chemical resistance High sealability Easy maintenance



SC Series Catalogue

Introduction	02
SC Series Properties	04
Products	
• PTFE SC1100	08
PTFE SC1200	10
PTFE SC1400	12
PTFE SC1410	14
• PTFE SC1600	16
PTFE SC1800	18
Quality Management	20
The Compounding Unit	21
SC Chemical Resistance Chart	22



SC Grades

Directly from Guarniflon® R&D Department

Guarniflon® SC series is truly a superior and unique material.

The exclusive properties of SC series are combined to deliver its superior performance to comply with today's clean air requirements through sealability and torque retention. Asbestos-free SC series gasket materials routinely outperforms all conventional PTFE products by drastically minimizing gasket creep and cold flow problems.

The overall benefits of Guarniflon® SC series over that of both conventional PTFE and competitive PTFE/filler blends are found in the areas of **environmental improvement and overall cost savings**.

These performing materials are intended for the **food, chemical, petrochemical, pharmaceutical, mining and paper industries**, able to replace asbestos and traditional PTFE seals.

6 different types of SC series materials – all of them *Made in Italy* – are available under the following codes:

SC1100 - SC1200 - SC1400 - SC1410 - SC1600 - SC1800

From Standard Products to Specialties

With Special Care of Environment

Production started in **1982**, focused on PTFE commodities, and has gradually included families of **specialties**, PTFE products studied and developed by the **Research and Development Department** in symbiosis with the **Technical Department** and the **Production Department** of Guarniflon*.

Engineered for precision and flexibility, the SC Series Sealing Sheets undergo trimming, cutting, logo application, quality control, and packaging on semi-automatic production lines—ensuring consistent excellence while adapting to unique customer specifications. Whether standard or bespoke, each sheet can be customized with product or customer logos for distinctive, personalized branding that speaks for itself.

Among the main properties:

Chemical Compatibility

Since the base of the SC products is made of PTFE, all 6 grades are distinguished by a high chemical compatibility, which is unmatched in other plastic products. **SC1800**, among others, boasts the highest compatibility and is therefore recommended for applications in particularly aggressive chemical environments.

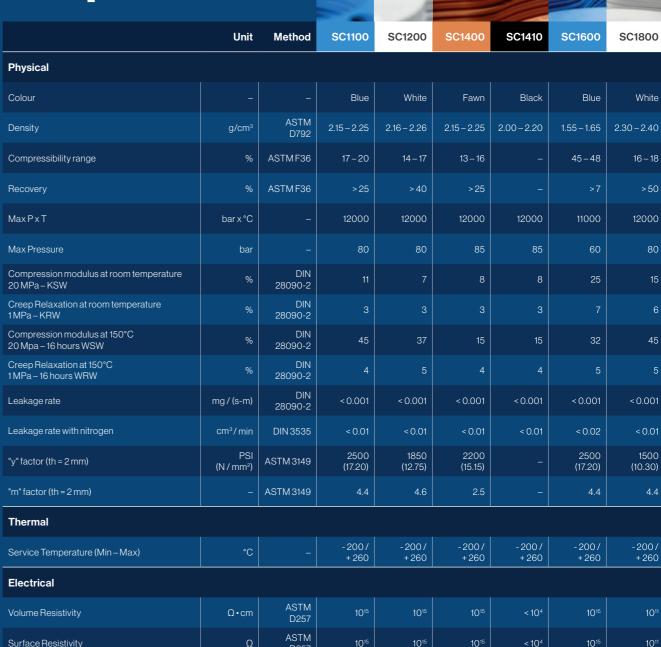
Wide Range of Operating Temperatures

From -200°C to +260°C, SC grades find applications in cryogenics as well as at high temperatures applications. To underline the greater stability of **SC1400** in presence of strong and frequent temperature variations.

Compatibility Towards the Environment and Humans

None of these grades contain asbestos, replaced by the more performing PTFE.

Typical Properties



Note: the data listed herein fall within the normal range of product properties described, but they should not be used to establish specification limits nor used alone as the basis of design. Guarniflon® Spa assumes no obligation or liability for any advice furnished by it or for results obtained to these products.

D257

Contact us: EN13555-based test values are available for the calculation of tightness and bolt torque for chemical and pressurized equipment according to EN1591-1.

* CD = Cross Directio



PTFE SC1100

SC1100 is a well-performing gasket material made by PTFE filled with glass fiber fillers. This combination significantly enhances the product's mechanical strength, wear resistance, and dimensional stability compared with virgin PTFE.

SC1100 is designed for demanding industrial applications, providing high chemical resistance, durability, and reliable sealing, even in extreme environments.

Standard Size Sheet

Dimension (mm) 1500 x 1500 Tol. +40 - 0 mm **Thickness (mm)** 1,0 - 1,5 - 2,0 - 3,0 Tol. +10% / -10%

Applications Chemical Industry Pulp & Paper Railroad Tankcar Industries Food & Beverage Oil & Gas A Refining

Key Features

Petrolchemical

SC1100 is extensively used in industrial applications due to the addition of glass fiber, which enhances its compressive strength, wear resistance, and resistance to deformation and abrasion. With decades of continuous improvement and precise manufacturing, SC1100 has become known for its reliability and innovation. A final surface treatment further improves leak-tightness, reducing internal leakage.

The homogeneous blend of glass fibers with pure PTFE ensures SC1100's exceptional physical and mechanical properties, offering the following combinations of features:

- Strong mechanical performance and dimensional
- Minimized cold flow and excellent creep resistance;
- Good compressibility and sealability;
- Superior chemical resistance;
- Non-flammable and non-aging;
- No water absorption.

Chemical Properties

PTFE SC1100 withstands all chemical agents except for alkaline metals, chlorotrifluoride and elemental fluorine at high temperature and pressure.

Electrical Properties

PTFE SC1100 is an excellent electrical insulator retaining its dielectric properties in a wide range of frequencies and temperatures with no substantial alterations up to 300°C.



Approvals & Compliances

FDA 21 CFR 177.1550 Certified safe for use in food	Perfluorocarbon resins	applications by the U.S. Food and Drug Administration.

Compliant with regulations for food Reg. EC N. 1935/2004 contact materials within the EU.

Test EN 13555

Typical Properties	Unit	Method	Data
Physical			
Size	mm	-	1500 x 1500*
Thickness	mm	_	1.0 / 1.5 / 2 / 3*
Colour	_	-	Blue
Density	g/cm³	ASTM D792	2.15 – 2.25
Compressibility range	%	ASTM F36	17 – 20
Recovery	%	ASTM F36	> 25
MaxPxT	bar x °C	-	12000
Max Pressure	bar	_	80
Compression modulus at room temperature - 20 MPa KSW	%	DIN 28090-2	11
Creep Relaxation at room temperature - 1 MPa - KRW	%	DIN 28090-2	3
Compression modulus at 150°C - 20 Mpa - 16 hours WSW	%	DIN 28090-2	45
Creep Relaxation at 150°C - 1 MPa - 16 hours WRW	%	DIN 28090-2	4
Leakagerate	mg / (s-m)	DIN 28090-2	< 0.001
Leakage rate with nitrogen	cm ³ / min	DIN 3535	< 0.01
"y" factor (th = 2 mm)	PSI (N / mm²)	ASTM 3149	2500 (17.20)
"m" factor (th = 2 mm)	_	ASTM 3149	4.4
Thermal			
Service Temperature (Min – Max)	°C	-	-200/+260
Electrical			
Volume Resistivity	Ω•cm	ASTM D257	1015
Surface Resistivity	Ω	ASTM D257	1015
Note: the data listed herein fall within the normal range of product properties describ specification limits nor used alone as the basis of design. Guarniflon® Spa assumes no o it or for results obtained to these products.	* Other measures available on request ** CD = Cross Direction		

PTFE SC1200

SC1200 is a high-performance gasket material composed of MPTFE with glass fiber fillers. This unique combination significantly enhances the product's elongation at break, deformation under load (lower Cold Flow), and reduces permeability compared with SC1100, in addition to product's mechanical strength, wear resistance, and dimensional stability.

Standard Size Sheet

Dimension (mm) 1500 x 1500 Tol. +40 - 0 mm **Thickness (mm)** 1,0 - 1,5 - 2,0 - 3,0 Tol. +10% / -10%

Applications



Chemical Industry



Pulp & Paper



Petrolchemical

Railroad Tankcar Industries



₩ Refining



Refrigeration & Cooling

Key Features

SC1200 is extensively used in industrial applications due to the addition of glass fiber, which enhances its compressive strength, wear resistance, and resistance to deformation and abrasion.

Similar to SC1100, thanks to the modified PTFE base, SC1200 grants superior performances even at low temperatures and in case of fast temperature changings: the material tents to adapt itself to thermal shrinkings or expansions of flanges. A final surface treatment further improves leak-tightness, reducing internal leakage.

Approvals & Compliances

FDA 21 CFR 177.1550 Certified safe for use in food Perfluorocarbon resins

applications by the U.S. Food and Drug Administration.

REG EU 10/2011

Compliant with regulations for food Reg. EC N. 1935/2004 contact materials within the EU.

TA-Luft VDI 2240

Meets standards for low fugitive emissions in industrial applications.







Typical Properties	Unit	Method	Data
Physical			
Size	mm	_	1500 x 1500*
Thickness	mm	_	1.0 / 1.5 / 2 / 3*
Colour	-	-	White
Density	g/cm ³	ASTM D792	2.16 – 2.26
Compressibility range	%	ASTM F36	14 – 17
Recovery	%	ASTM F36	> 40
Max P x T	bar x °C	-	12000
Max Pressure	bar	_	80
Compression modulus at room temperature - 20 MPa KSW	%	DIN 28090-2	7
Creep Relaxation at room temperature - 1 MPa - KRW	%	DIN 28090-2	3
Compression modulus at 150°C - 20 Mpa - 16 hours WSW	%	DIN 28090-2	37
Creep Relaxation at 150°C - 1 MPa - 16 hours WRW	%	DIN 28090-2	5
Leakage rate	mg / (s-m)	DIN 28090-2	< 0.001
Leakage rate with nitrogen	cm ³ / min	DIN 3535	< 0.01
"y" factor (th = 2 mm)	PSI (N / mm²)	ASTM 3149	1850 (12.75)
"m" factor (th = 2 mm)	_	ASTM 3149	4.6
Thermal			
Service Temperature (Min – Max)	°C	_	-200/+260
Electrical			
Volume Resistivity	Ω·cm	ASTM D257	1015
Surface Resistivity	Ω	ASTM D257	1015
Note: the data listed herein fall within the normal range of product properties described, specification limits nor used alone as the basis of design. Guarniflon® Spa assumes no oblig it or for results obtained to these products.	* Other measures available on request ** CD = Cross Direction		

SC1400

SC1400 is a high-performance gasket material composed of **MPTFE** with **silica fillers**. SC1400 is developed to ensure excellent **chemical resistance** across a wide range of applications. It is particularly **well-suited for use with inorganic acids** at any concentration (excluding hydrofluoric acid), where it delivers **superior performance** compared to virgin PTFE materials.

Standard Size Sheet

Dimension (mm) 1500 x 1500 Tol. +40 - 0 mm **Thickness (mm)** 1,0 - 1,5 - 2,0 - 3,0 Tol. +10% / -10%







Typical Properties	Unit	Method	Data
Physical			
Size	mm	_	1500 x 1500*
Thickness	mm	_	1.0 / 1.5 / 2 / 3*
Colour	-	-	Fawn
Density	g/cm³	ASTM D792	2.15 – 2.25
Compressibility range	%	ASTM F36	13 – 16
Recovery	%	ASTM F36	> 25
Resiliency	%	ASTMF36	5
Sealability	ml/h	ASTM F37	0.20
Creep Relaxation	%	ASTM F38	40
Max P x T	bar x °C	_	12000
Max Pressure	bar	_	85
Compression modulus at room temperature - 20 MPa KSW	%	DIN 28090-2	8
Creep Relaxation at room temperature - 1 MPa - KRW	%	DIN 28090-2	3
Compression modulus at 150°C - 20 Mpa - 16 hours WSW	%	DIN 28090-2	15
Creep Relaxation at 150°C - 1 MPa - 16 hours WRW	%	DIN 28090-2	4
Leakagerate	mg / (s-m)	DIN 28090-2	< 0.001
Leakage rate with nitrogen	cm ³ / min	DIN 3535	< 0.01
"y" factor (th = 2 mm)	PSI (N / mm²)	ASTM 3149	2200 (15.15)
"m" factor (th = 2 mm)	_	ASTM 3149	2.5
Thermal			
Service Temperature (Min – Max)	°C	_	- 200 / + 260
Electrical			
Volume Resistivity	Ω•cm	ASTM D257	1015
Surface Resistivity	Ω	ASTM D257	1015
Note: the data listed herein fall within the normal range of product properties described, by specification limits nor used alone as the basis of design. Guarniflon® Spa assumes no obligation of or results obtained to these products.	Other measures available on request CD = Cross Direction		

SC1410

Like SC1400, **SC1410** is a **MPTFE-based gasket sheet** filled with **silica**, developed to ensure **excellent chemical resistance** across a wide range of applications. It is particularly **well-suited for use with inorganic** acids at any concentration (excluding hydrofluoric acid), where it delivers **superior performances** compared to other PTFE grades. Thanks to the inclusion of **special additives**, the material also exhibits **atistatic properties**, making it suitable for **advanced technological environments** where both chemical resistance and electrical performances are critical.

Standard Size Sheet

Dimension (mm) 1500 x 1500 Tol. +40 - 0 mm

Thickness (mm) 1,0 - 1,5 - 2,0 - 3,0 Tol. +10% / -10% **Applications** Pharma & Medical Chemical Industry Copper Refining Food & Beverage Mining Processing Plant Petrolchemical Explosive Environments Pulp & Paper **Key Features** Thanks to its improved formulation, the SC1410 improved creep resistance and dimensional stability is a preferred choice in critical environments such as ATEX application due to its electrical properties. It is an evolution of the SC1400 to allow the field of application of this material to be extended.



Typical Properties	Unit	Method	Data
Physical			
Size	mm	_	1500 x 1500*
Thickness	mm	_	1.0 / 1.5 / 2 / 3*
Colour	_	_	Black
Density	g/cm³	ASTM D792	2.00 – 2.20
Max P x T	bar x °C	_	12000
Max Pressure	bar	_	85
Compression modulus at room temperature - 20 MPa KSW	%	DIN 28090-2	8
Creep Relaxation at room temperature - 1 MPa - KRW	%	DIN 28090-2	3
Compression modulus at 150°C - 20 Mpa - 16 hours WSW	%	DIN 28090-2	15
Creep Relaxation at 150°C - 1 MPa - 16 hours WRW	%	DIN 28090-2	4
Leakage rate	mg / (s-m)	DIN 28090-2	< 0.001
Leakage rate with nitrogen	cm ³ / min	DIN 3535	< 0.01
Thermal			
Service Temperature (Min – Max)	°C	_	- 200 / + 260
Electrical			
Volume Resistivity	Ω•cm	ASTM D257	< 104
Surface Resistivity	Ω	ASTM D257	< 104
Note: the data listed herein fall within the normal range of product properties described, by specification limits nor used alone as the basis of design. Guarniflon® Spa assumes no obligate it or for results obtained to these products.	* Other measures available on request ** CD = Cross Direction		

SC1600

SC1600 is a PTFE-based gasket sheet enhanced with hollow glass microspheres, developed to combine excellent chemical resistance with superior conformability. Its unique composition ensures reliable sealing even at reduced surface pressures, making it an ideal solution for assemblies where limited bolt load is available.

Standard Size Sheet

Dimension (mm) 1500 x 1500 Tol. +40 - 0 mm **Thickness (mm)** 1,0 - 1,5 - 2,0 - 3,0 Tol. +10% / -10%



Applications



Chemical Industry



Railroad Tankcar Industries



Refining



Petrolchemical



Pulp & Paper

Key Features

SC1600 delivers consistent performance in a wide range of aggressive chemical environments, outperforming conventional PTFE-based materials in adaptability and ease of installation. SC1600 grants the best compressibility and the best recovery after compression, enhanced compressibility for low bolt loads and improved flexibility.

Suitable for moderate concentrations of acids & caustics, chlorine and hydrogen peroxide, it can be used for all concentrations of sulfuric acid.

Approvals & Compliances

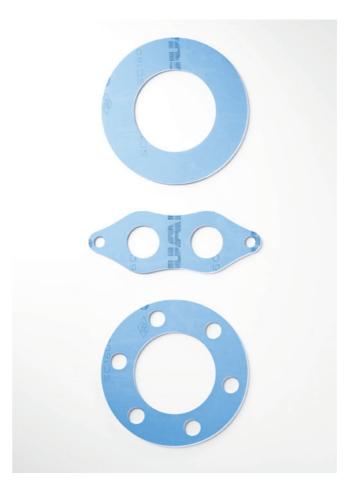
FDA 21 CFR 177.1550 Certified safe for use in food Perfluorocarbon resins

applications by the U.S. Food and Drug Administration.

TA-Luft VDI 2240

Meets standards for low fugitive emissions in industrial applications.

Test EN 13555





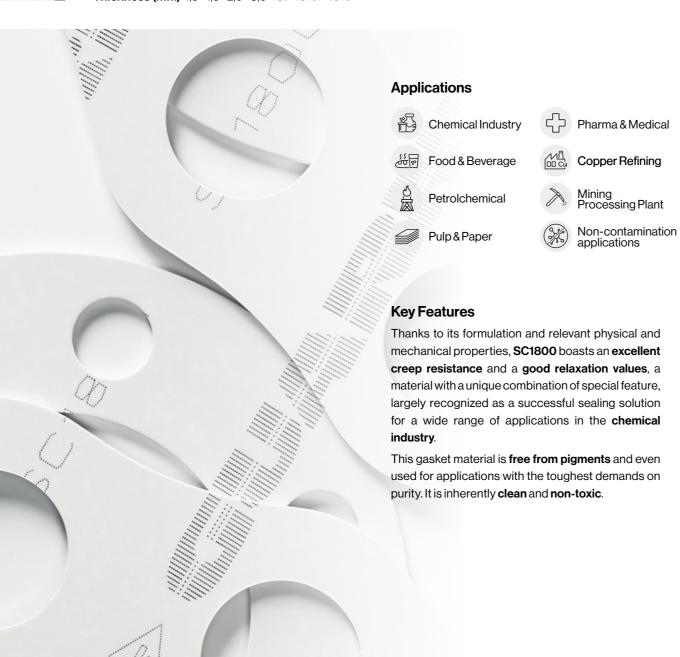
Typical Properties	Unit	Method	Data
Physical			
Size	mm	_	1500 x 1500*
Thickness	mm	_	1.0 / 1.5 / 2 / 3*
Colour	-	-	Blue
Density	g/cm³	ASTM D792	1.55 – 1.65
Compressibility range	%	ASTMF36	45 – 48
Recovery	%	ASTM F36	>7
MaxPxT	bar x °C	-	11000
Max Pressure	bar	_	60
Compression modulus at room temperature - 20 MPa KSW	%	DIN 28090-2	25
Creep Relaxation at room temperature - 1 MPa - KRW	%	DIN 28090-2	7
Compression modulus at 150°C - 20 Mpa - 16 hours WSW	%	DIN 28090-2	32
Creep Relaxation at 150°C - 1 MPa - 16 hours WRW	%	DIN 28090-2	5
Leakage rate	mg / (s-m)	DIN 28090-2	< 0.001
Leakage rate with nitrogen	cm ³ / min	DIN 3535	< 0.02
"y" factor (th = 2 mm)	PSI (N / mm²)	ASTM 3149	2500 (17.20)
"m" factor (th = 2 mm)	_	ASTM 3149	4.4
Thermal			
Service Temperature (Min – Max)	°C	_	- 200 / + 260
Electrical			
Volume Resistivity	Ω·cm	ASTM D257	1015
Surface Resistivity	Ω	ASTM D257	1015
Note: the data listed herein fall within the normal range of product properties describe specification limits nor used alone as the basis of design. Guarniflon® Spa assumes no obit or for results obtained to these products.	Other measures available on request CD = Cross Direction		

PTFE SC1800

SC1800 is a high-performance gasket material composed of **MPTFE** with **barium sulfate fillers**. This unique combination significantly enhances the product's **mechanical strength**, **wear resistance**, and **dimensional stability** compared with virgin PTFE. SC1800 is designed for use in **aggressive chemicals**, including caustics, hydrogen peroxide, sodium hypochlorite, nitric acid, hydrofluoric acid, vinyl chloride, methyl methacrylates, and styrene liquors and digester in pulp and paper service.

Standard Size Sheet

Dimension (mm) 1500 x 1500 Tol. +40 - 0 mm **Thickness (mm)** 1,0 - 1,5 - 2,0 - 3,0 Tol. +10% / -10%









Typical Properties	Unit	Method	Data
Physical			
Size	mm	_	1500 x 1500*
Thickness	mm	_	1.0 / 1.5 / 2 / 3*
Colour	-	-	White
Density	g/cm³	ASTM D792	2.30 – 2.40
Compressibility range	%	ASTMF36	16 – 18
Recovery	%	ASTM F36	> 50
Max P x T	bar x °C	-	12000
Max Pressure	bar	_	80
Compression modulus at room temperature - 20 MPa KSW	%	DIN 28090-2	15
Creep Relaxation at room temperature - 1 MPa - KRW	%	DIN 28090-2	6
Compression modulus at 150°C - 20 Mpa - 16 hours WSW	%	DIN 28090-2	45
Creep Relaxation at 150°C - 1 MPa - 16 hours WRW	%	DIN 28090-2	5
Leakage rate	mg / (s-m)	DIN 28090-2	< 0.001
Leakage rate with nitrogen	cm ³ / min	DIN 3535	< 0.01
"y" factor (th = 2 mm)	PSI (N / mm²)	ASTM 3149	1500 (10.30)
"m" factor (th = 2 mm)	_	ASTM 3149	4.4
Thermal			
Service Temperature (Min – Max)	°C	_	- 200 / + 260
Electrical			
Volume Resistivity	Ω•cm	ASTM D257	1011
Surface Resistivity	Ω	ASTM D257	1011
Note: the data listed herein fall within the normal range of product properties described, specification limits nor used alone as the basis of design. Guarniflon® Spa assumes no obligation for results obtained to these products.			* Other measures available on request ** CD = Cross Direction

R&D Team Quality Management

Guarniflon® have been Quality Certified since 1993, certificate n. 015, one of the first in its own field. Nowadays Guarniflon® is UNI EN ISO 9001 and IATF 16949:2016 certified by the certification body Cermet.

Guarniflon* policy implies a high powered and experienced R&D Team continuously improving and developing day by day new solutions for new applications.

SC Series Material Compliance and Approvals

FDA 21 CFR 177.1550

Certified safe for use in food applications by the U.S. Food and Drug Administration

REG EU 10/2011 Reg. EC N. 1935/2004

Compliant with regulations for food contact materials within the EU

TA-Luft VDI 2240

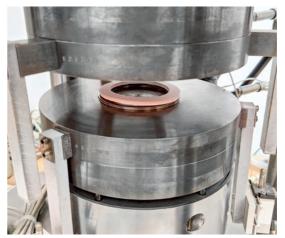
Meets standards for low fugitive emissions in industrial applications

BAM

Certified for the use with the presence of gaseous oxygen













The Raw Material Compounding Unit

The **Flontech** division of Guarniflon® SPA boasts almost more than 2 decadeslong experience in the preparation of both **standard** and **specific raw materials** based on **customer requirements**.

The compounding technologies mix **special and selected fillers** to the PTFE bases to modify and improve the main properties of the materials that will be subsequently processed into semi-finished products. The opportunity to produce raw materials independently offers an undeniable advantage to Guarniflon* in offering **customized solutions** to its customers: when faced with requests for special applications, we are able to study and produce **the most suitable raw materials**.

This makes the difference.

SC Chemical Resistance Chart

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• Not	recor	mme	nded

Chemicals	SC1100 SC1200 SC1400 SC1600 SC1600	Chemicals	SC1100 SC1200 SC1400 SC1600 SC1800	Chemicals	SC1100 SC1200 SC1400 SC1600 SC1800
Abietic Acid	• • • •	Calcium Hypochlorite	• • • •	Dowfax 2A0	• • • • •
Acetaldehyde	• • • •	Calcium Nitrate	• • • •	Dowfax 2A1 Dowfrost	• • • • •
Acetamide Acetic Acid	• • • • •	Calflo AF Calflo FG	• • • • •	Dowfrost HD	• • • • •
Acetic Anhydride	• • • • •	Calflo HTF	• • • • •	Dowtherm 4000	• • • • •
Acetone	• • • •	Calflo LT	• • • •	Dowtherm A	• • • • •
Acetonitrile Acetophenone	••••	Cane Sugar Liquors Caprolactam	••••	Dowtherm E Dowtherm G	• • • • •
2-Acetylaminofluorene	• • • • • •	Captan	• • • • •	Dowtherm HM	• • • • •
Acetylene		Carbaryl		Dowtherm J	
Acrolein	• • • •	Carbolic Acid, Phenol	• • • •	Dowtherm Q	• • • • •
Acrylamide Acrylic Acid	• • • • •	Carbon Dioxide, Dry and Wet Carbon Disulfide	••••	Dowtherm SR-1 Dye Liquor	<u> </u>
Acrylic Anhydride	• • • • •	Carbon Monoxide	• • • • •	Epichlorohydrin	• • • • •
Acrylonitrile		Carbon Tetrachloride		1,2-Epoxybutane	
Adipic Acid	• • • • •	Carbonic Acid	• • • •	Ethane	• • • • •
Adiponitrile Air, 65°C and below	••••	Carbonyl Sulfide Castor Oil	••••	Ethers Ethyl Acetate	• • • • •
Alkaline Lye	• • • •	Catechol	• • • • •	Ethyl Acrylate	• • • • •
Allyl Acetate		Caustic Soda	• • • •	Ethyl Alcohol	
Allyl Chloride	• • • •	Cetane (Hexadecane)	• • • •	Ethyl Benzene	• • • • •
Allyl Methacrylate Aluminum Chloride	• • • •	Chile Saltpetre China Wood Oil	••••	Ethyl Carbamate Ethyl Cellulose	• • • • •
Aluminum Fluoride	• • • •	Chloramben	• • • •	Ethyl Chloride	• • • • •
Aluminum Hydroxide (solid)		Chloroazotic Acid (Aqua Regia)		Ethyl Ether	
Aluminum Nitrate	• • • •	Chlordane	• • • •	Ethyl Hexacrylate	• • • • •
Aluminum Sulfate Alums	••••	Chlorinated Hydrocarbons Chlorinated Solvent, Dry and Wet	••••	Ethyl Hexanol Ethyl Hexanoate	• • • • •
4-Aminodiphenyl		Chlorine, Dry		2-Ethyl Hexyl Acrylate	• • • • •
Ammonia, Gas, 65°C and below	• • • •	Chlorine, Wet		Ethylene	
Ammonia, Gas, above 65°C	• • • •	Chlorine Dioxide	• • • •	Ethylene Chloride	
Ammonia, Liquid, Anhydrous Ammonium Chloride	• • • •	Chlorine Trifluoride Chloroacetic Acid	• • • •	Ethylene Bromide Ethylene Dibromide	• • • • •
Ammonium Hydroxide	• • • • •	Chlorobenzene	• • • • •	Ethylene Dichloride	• • • • •
Ammonium Nitrate		2-Chloroacetophenone		Ethylene Ether	
Ammonium Phosphate, Monobasic	• • • •	Chlorobenzilate	• • • •	Ethylene Glycol	• • • • •
Ammonium Phosphate, Dibasic Ammonium Phosphate, Tribasic	• • • • •	Chloroethane Chloroethylene	••••	Ethyleneimine Ethylene Oxide	<u> </u>
Ammonium Sulphate	• • • • •	Chloroform	• • • • •	Ethylene Thiourea	• • • • •
Amyl Acetate		Chloromethyl Methyl Ether	• • • •	Ethylidine Chloride	
Amyl Alcohol	• • • •	Chloronitrous Acid (Aqua Regia)	• • • • •	Fatty Acid	• • • • •
Aniline, Aniline Oil Aniline Dyes	••••	Chloroprene Chlorosulphonic Acid	••••	Ferric Chloride Ferric Phosphate	• • • • •
o-Anidisine	• • • • •	Chrome Plating Solutions	• • • •	Ferric Sulphate	• • • • •
Antimony Trichloride		Chromic Acid		Fluorine, Gas	
Acqua Regia	• • • •	Chromic Anhydride	• • • •	Fluorine, Liquid	• • • • •
Arsenic Acid Arseneous Acid	• • • •	Chromic Trioxide Citric Acid	••••	Fluorine Dioxide Fluorosilicic Acid	• • • • •
Aroclors	• • • • •	Coke Oven Gas	• • • •	Formaldheyde	• • • • •
Asphalt		Copper Chloride	• • • •	Formic Acid	
Aviation Gasoline	• • • • •	Copper Sulfate	• • • •	Freons	• • • • •
Barium Hydroxide Barium Chloride	• • • • •	Corn Oil 10 Cotton Seed Oil	••••	Fuel Oil Fuel Oil, Acid	• • • • •
Barium Hydroxide	• • • •	Creosote	• • • •	Furfural	
Barium Sulphide		Cresols, Cresylic Acid	• • • •	Gasoline	
Baygon Beer	• • • • •	Crotonic Acid Crude Oil	• • • • •	Sour Gas Gelatin	• • • • •
Bendaldehyde	• • • • • •	Cumene	• • • • •	Glucose	• • • • •
Benzene, Benzol		Cyclohexane		Glue, Protein Base	
Benzene Sulphonic Acid	• • • •	Cyclohexanone	• • • •	Glycerin, Glycerol	• • • • •
Benzidine Benzoic Acid	• • • • •	Cyclohexanone 2, 4-D, Salts and Esters Cyclohexanol	• • • • •	Glycol Glyoxillic Acid	• • • • •
Benzonitrile	• • • • •	Detergent Solution	• • • •	Grain Alcohol	• • • • •
Benzoquinone		Diazomethane		Grease, Petroleum Based	
Benzotrichloride	• • • • •	Dibenzofuran	• • • •	Green Sulphate Liquor	• • • •
Benzoil Chloride Benzyl Alcohol	••••	Dibenzyl Ether 1,2-Dibromo-3-chloropropane	• • • • •	Heating Oil Heptachlor	• • • • •
Benzyl Chloride	• • • • •	Dibromoethane	• • • • •	Heptane	• • • • •
Biphenyl		Dibutyl Phthalate		Hexachlorobenzene	
Bis(2-chloroethyl)ether	• • • •	Dibutyl Sebacate Dichlorobenzene (o - 1.4)	• • • • •	Hexachlorobutadiene	• • • • •
Bis(chloromethyl)ether Bis(2-ethylhexyl)phthalate	• • • • •	3.3-Dichlorobenzidene	••••	Hexachlorocyclopentadiene Hexachloroethane	• • • • •
Black Sulphate Liquor	• • • •	Dichloroethane (1,1 - 1,2)	• • • • •	Hexadecane	• • • • •
Blast Furnace Gas		1,1-Dichloroethylene	• • • • •	Hexamethylene diisocyanate	
Bleaching Agents Calcium Hypochlorite	• • • •	Dichloroethyl Ether Dichloromethane	••••	Hexamethylphosphoramide Hexane	• • • • •
Chlorine Dioxide. Wet	••••	Dichloropropane (12 - 13)		Hexone	••••
Chlorite	• • • •	Dichlorvos	• • • •	Hydraulic Oil, Glycol	• • • • •
Hydrosulphite		Diesel Oil	• • • •	Hydraulic Oil, Mineral	
Lithium Hypochlorite	• • • •	Diethanol Amine	• • • •	Hydraulic Oil, Phosphate Ester	• • • • •
Peroxides Dilute Sodium Hypoclorite	• • • • •	N,N-Diethylaniline Diethyl Carbonate	• • • • •	Synthetic Oil Hydrazine	• • • • •
Boiler Feed Water		Diethyl Sulphate	• • • • • •	Hydrocarbons (aromatic)	• • • • •
Borax	• • • •	3,3-Dimethoxybenzidene	• • • • •	Hydrocarbons aliphatic (sat.)	• • • • •
Boric Acid Brine (Sodium Chloride)	• • • •	Dimethyl Amine	• • • •	Hydrocarbon aliphatic (unsat.)	
Brine (Sodium Chloride) Bromine Trifluoride	• • • •	Dimethylaminoazobenzene Dimethylaminoethyl Acrylate	••••	Hydrobromic Acid Hydrochloric Acid	• • • • •
Bromoform		N,N-Dimethyl Aniline		Hydrocyanic Acid	• • • •
Bromomethane	• • • •	3,3-Dimethylbenzidine	• • • • •	Hydrofluoric Acid, up to Anhydrous, 65°C & below	• • • •
Butadiene Butana	• • • •	Dimethyl Carbamoyl Chloride	• • • •	Hydrofluoric Acid less than 65%, above 65°C	• • • •
Butane 2-Butanone	• • • • •	Dimethyl Ether Dimethylformamide	• • • • •	Hydrofluoric Acid, 65% to Anhydrous, above 65°C Hydrofluoric Acid Anhydrous	• • • • •
Iso-Butyl Acetate	• • • • •	Dimethyl Hydrazine, Unsimmetrical	• • • • •	Hydrofluorosilicic Acid	• • • •
n-Butyl Acetate		Dimethyl Phthalate		Hydrogen	
n-Butyl Acrylate	• • • •	Dimethyl Sulphate	• • • • •	Hydrogen Bromide	• • • • •
Butyl Alcohol n-Butylamine	••••	4,6-Dinitro-o-Cresol and Salts 2,4-Dinitrophenol	••••	Hydrogen Chloride Hydrogen Fluoride	• • • • •
tert-Butyl Amine	• • • • •	2,4-Dinitroprierioi 2.4-Dinitrotoluene	••••	Hydrogen Peroxide, 10%	• • • • •
n-Butyl Methacrylate	• • • • •	Dioxane	• • • • •	Hydrogen Peroxide, 10 - 90%	• • • • •
Butyric Acid		1,2-Diphenylhydrazine	• • • • •	Hydrogen Sulfide, Dry and Wet	• • • • •
Calcium Bisulphite	• • • •	Diphyl DT Dowanol DB	• • • •	Hydroquinone	
Calcium Chlorate	• • • • •	Dowanol DB Dowanol EB	• • • • •	lodomethane Isobutane	• • • • •
Calcium Cyanamide		DOWARDIER			

SC Chemical Resistance Chart .Suitable Depends on operation Not recommended.

Depends on ope	eratin
Notrocommono	104

Chemicals	SC1100 SC1200 SC1400 SC1600 SC1800	Chemicals	SC1100 SC1200 SC1400 SC1600 SC1800	Chemicals	SC1100 SC1200 SC1400 SC1600 SC1600
Isophorone	• • • • •	Pentachloronitrobenzene	• • • • •	Sulfuric Acid, 10%, 65°C and below	• • • •
Isopropil Acetate		Pentachlorophenol		Sulfuric Acid, 10%, above 65°C	
Isopropyl Alcohol	• • • • •	Pentane	• • • • •	Sulfuric Acid, 10-75%, 65°C and below	• • • •
Jet Fuels (JP Types)	• • • •	Perchloric Acid	• • • •	Sulfuric Acid, 75-98%, 65°C and below	• • • •
Kerosene Laquer Solvent	• • • • •	Perchloroethylene Petroleum Oils	• • • • •	Sulfuric Acid, 75-98%, 65°C to 260°C Sulfuric Acid, fuming	• • • • •
.aquer solverii.	• • • • •	Petrol (Gasoline)	• • • • •	Sulfurous Acid	
actic Acid, 65°C and below	• • • • •	Phenol	• • • •	Syltherm 800	
actic Acid, above 65°C		p-Phenylenediamine	• • • •	Syltherm XLT	
ime		Phosgene		Táll Oil	
ime Saltpeter (Calcium Nitrate)		Phosphate Esters	• • • •	Tannic Acid	• • • • •
Lindane	• • • • •	Phosphine	• • • • •	Tartaric Acid	• • • • •
inseed Oil	• • • •	Phosphoric Acid, crude	• • • •	2,3,7,8-TCDB-p-Dioxin	• • • • •
.ithium Bromide .ithium Melt	• • • • •	Phosphoric Acid, less than 45% Phosphoric Acid, above 45%, to 65°C	• • • •	Tertiary Butyl Amine Tetrabromoethane	• • • • •
Lubricating Oils, Mineral or Petroleum types		Phosphoric Acid, above 45%, to 65°C Phosphoric Acid, above 45%, above 65°C	••••	Tetrachloroethane	
Lubricating Oils, Will Erar of Tetroleum types	• • • • •	Phosphorous Elemental	• • • •	Tetrachloroethylene	
Machine Oils		Phosphorous Pentachloride		Tetrahydrofuran, THF	
Magnesium Chloride		Phtalic Acid	• • • •	Tetra Isopropyl Titanate	
Magnesium Hydroxide		Phtalic Anhydride		Therminol 44	
Magnesium Sulfate	• • • •	Water Solution	• • • •	Therminol 55	• • • • •
Maleic Acid	• • • •	Pinene	• • • •	Therminol 59	• • • • •
Maleic Anhydride	• • • •	Piperidine	• • • •	Therminol 60	• • • • •
Mercuric Chloride	• • • •	Plating Solutions		Therminol 66	• • • • •
Mercury	• • • •	Cadmium	• • • •	Therminol 75	
Vethane	• • • •	Chrome	• • • •	Therminol D12	
Methanol Mathaga dia Apid	• • • •	Copper	• • • •	Therminol LT	
Methacrylic Acid	• • • • •	Gold Silver	• • • • •	Therminol VP-1 Therminol XP	• • • • •
Methoxychlor Methyl Acrylate	••••	Tin	• • • •	Thionyl Chloride	• • • • •
P-Methylaziridine	- • • • • •	Zinc	• • • • •	Titanium Sulphate	• • • • •
Methyl Bromide	••••	Polyacrylonitrile	••••	Titanium Tetrachloride	
Methyl Chloride	••••	Polychlorinated Biphenyls	• • • • •	Toluene	
Methyl Chloroform		Potash, Potassium Carbonate	• • • •	2.4-Toluenediamine	
1,4-Methylene Bis(2-chloroaniline)		Potassium Melt		2,4-Toluenediisocyanate	
Methylene Chloride		Potassium Acetate		Toluene Sulphonic Acid	
1,4-Methylene Dianiline		Potassium Bichromate		Towns Gas	
Methylene Diphenyldiisocyanate		Potassium Chromate, Red	• • • •	o-Toluidine	• • • • •
Methyl Ethyl Ketone	• • • •	Potassium Cyanide	• • • •	Toxaphine	• • • • •
Methyl Hydrazine	• • • •	Potassium Dichromate	• • • • •	Transformer Oil (Mineral Type)	• • • • •
Methyl lodide	• • • •	Potassium Hydroxide	• • • •	Transmission Fluid A	• • • • •
Methyl Isobutyl Ketone	• • • • •	Potassium Nitrate	• • • •	Tributyl Phosphate	• • • • •
Methyl Isocyanate	• • • • •	Potassium Permanganate Potassium Sulphate	• • • • •	Trichloroacetic Acid 1,2,4-Trichlorobenzebe	• • • • •
Methyl Methacrylate N-Meyhl Pyrrolidone	••••	Producer Gas	• • • • •	1,1,2-Trichloroethane	
Vethyl tert-Butyl Ether (MTBE)	• • • • •	Propane	• • • • •	Trichloroethylene	
Methylene Methacrylate	• • • • •	1,3-Propane Sultone	• • • • •	2,4,5-Trichlorophenol	
Methylene Chloride		Beta-Propiolactone		2,4,6-Trichlorophenol	
Vilk 10		Propionaldheyde		Tricresylphosphate	
Vineral Oils		Propoxur (Baygon)		Triethanolamine	
Mobiltherm 600		Propyl Nitrate		Triethyl Aluminum	
Mobiltherm 603		Propylene		Triethylamine	
Mobiltherm 605		Propylene Dichloride	• • • •	Trifluralin	• • • • •
Mobiltherm Light	• • • •	Propylene Oxide	• • • •	2,2,4-Trimethylpentane	• • • • •
Molten Alkali Metals	• • • • •	Prussic Acid, Hydrocyanic Acid	• • • • •	Tung Oil	• • • • •
Monoethylene Glycol	• • • • •	Pyridine	• • • • •	Turpentine	
Monomethylamine	• • • • •	Quinoline Quinone	• • • • •	UCON Heat Transfer Fluid 500 UCON Process Fluid WS	• • • • •
Multitherm 100 Multitherm 503		Refrigerants (Freon Type)		Urea	• • • • •
Multitherm IG-2	••••	Salt Water	• • • • •	Varnish	
Multitherm PG-1	• • • • •	Saltpeter, Potassium Nitrate	• • • • •	Vegetable Oil	
Muriatic Acid	• • • • •	Sewage	• • • • •	Vinegar	
Vaphtha	• • • •	Silver Nitrate	• • • •	Vinyl Acetate	• • • • •
Naphthalene		Silicone Oil		Vinyl Bromide	
Naphthols	• • • •	Skydrols		Vinyl Chloride	
Natural Gas		Soap Solutions		Vinylidene Chloride	
Nickel Chloride	• • • •	Soda Ash, Sodium Carbonate	• • • •	Vinyl Methacrylate	• • • • •
Nickel Sulphate	• • • •	Sodium Bicarbonate (Baking Soda)	• • • •	Water, Deionised	• • • • •
Nitric Acid, less than 30%	• • • •	Sodium Bisulphate, dry	• • • •	Water, Desalinated	• • • • •
Nitric Acid, above 30%	• • • • •	Sodium Bisulphite	• • • • •	Water, Distilled	• • • • •
Red Furning	• • • •	Sodium Chlorate	• • • •	Water, Mine	
Orude Oil	• • • •	Sodium Chloride	• • • • •	Water, Potable	
Vitrobenzene	• • • •	Sodium Cyanide	• • • •	Water, Return Condensate	
4-Nitrobiphenyl	• • • • •	Sodium Melt Sodium Hydrovida	• • • •	Water, Seawater Whiskey and Wines	• • • • •
2-Nitro-Butanol Nitrocalcite	••••	Sodium Hydroxide Sodium Hypochlorite	••••	Whiskey and Wines White Spirit	• • • • •
Nitrocaicile	- • • • • •	Sodium Metaborate Peroxyhydrate		Wood Alcohol	• • • • •
Nitrogen Vitrogen Tetroxide	••••	Sodium Metaphosphate	••••	Xceltherm 500	
Nitrohydrochloric Acid	• • • • •	Sodium Nitrate	• • • • •	Xceltherm 600	
Vitromethane	• • • • •	Sodium Perborate	• • • • •	Xceltherm MK1	
2-Nitro-2-Methyl Propanol	• • • •	Sodium Peroxide	• • • •	Xceltherm XT	
Vitromuriatic Acid	• • • •	Sodium Phosphate, monobasic	• • • •	Xylene	
-Nitrophenol		Sodium Phosphate, dibasic		Zinc Chloride	
P-Nitropropane		Sodium Phosphate, tribasic		Zinc Sulphate	
N-Nitrosodimethylamine		Sodium Silicate	• • • •		
N-Nitroso-N-Methylurea		Sodium Sulphate			
V-Nitrosomorpholine	• • • •	Sodium Sulphide			
Norge Niter (Calcium Nitrate)	• • • •	Sodium Superoxide			
N-Octadecyl Alcohol	• • • •	Sodium Tiosulphate, "Hypo"			
Octane	• • • •	Soybean Oil	• • • • •		
Dil, Petroleum	• • • •	Starch	• • • •		
Dils, Animal and Vegetable 10	• • • •	Stannic Chloride	• • • •	IMPORTANT NOTE:	
Deic Acid	• • • • •	Steam Saturated, to 10 bar	• • • • •	This Table provides some typical chemical r	resistance according
Neum	• • • •	Stearic Acid	• • • •	to field testing, customer field reports and/o	or internal lab testino
Orthodichlorobenzene	• • • • •	Stearyl Methacrylate Stoddart Solvant	• • • •	but it is not intended to be a warranty of perfor	-
Oxalic Acid	• • • •	Stoddart Solvent	• • • •	different specific uses of sealing products ar	
Oxygen, Gas	• • • • •	Styrene Styrene Ovide	• • • • •		
Ozone		Styrene Oxide		used You should require independent	study and specific

to field testing, customer field reports and/or internal lab testing but it is not intended to be a warranty of performance. Due to a lot of different specific uses of sealing products and typical equipment used You should require independent study and specific evaluation for Your suitability. While taking care of the compilation of this chart, Guarniflon® SpA assume no responsibility for any accident due to a wrong evaluation of every single applications. However for specific application recommendations please consult Guarniflon® Technical Department.

Parathion Paraxylene

Styrene Oxide
Styrene Oxide
Sulfur Chloride
Sulfur Chloride
Sulfur Dioxide
Sulfur Dioxide
Sulfur Motten
Sulfur Trioxide, dry
Sulfur Trioxide, wet



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