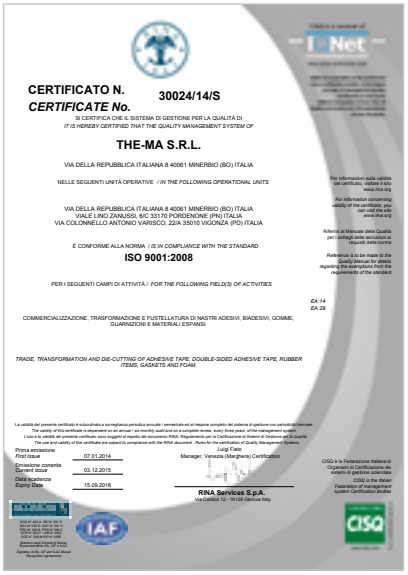
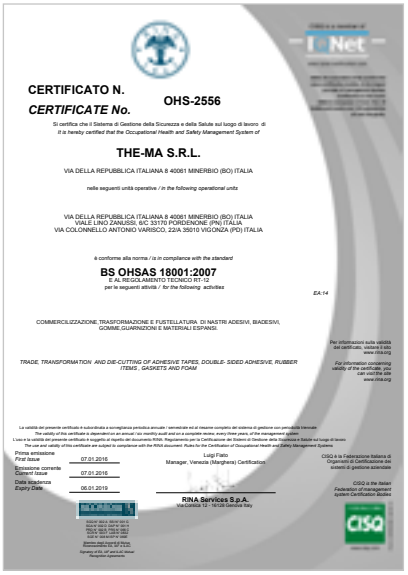
Silicone & PTFE Polymers Division

CHEMICAL and THERMO-ELECTRIC insulation

... your business allies



CERTIFICATO N. 30024/14/S
CERTIFICATE No.
SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI
IT IS HEREBY CERTIFIED THAT THE QUALITY MANAGEMENT SYSTEM OF
THE-MA S.R.L.
VIA DELLA REPUBBLICA ITALIANA 8 40061 MINERBIO (BO) ITALIA
NELLE SEGUENTI UNITÀ OPERATIVE / IN THE FOLLOWING OPERATIONAL UNITS
VIA DELLA REPUBBLICA ITALIANA 8 40061 MINERBIO (BO) ITALIA
VIALE LINO ZANUSSI, 6/C 33170 PORDENONE (PN) ITALIA
VIA COLONNELLO ANTONIO VARISCO, 22/A 35010 VIGONZA (PD) ITALIA
È CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD
ISO 9001:2008
PER I SEGUENTI CAMPI DI ATTIVITÀ / FOR THE FOLLOWING FIELD(S) OF ACTIVITIES
EA:14
EA:29
COMMERCIALIZZAZIONE, TRASFORMAZIONE E FUSTELLATURA DI NASTRI ADESIVI, BIADESIVI, GOMME, GUARNIZIONI E MATERIALI ESPANSI.
TRADE, TRANSFORMATION AND DIE-CUTTING OF ADHESIVE TAPE, DOUBLE-SIDED ADHESIVE TAPE, RUBBER ITEMS, GASKETS AND FOAM.
Per informazioni sulla validità del certificato, visitare il sito www.rina.org
For information concerning validity of the certificate, you can visit the site www.rina.org
Riferirsi al Manuale della Qualità per i dettagli delle esclusioni ai requisiti della norma
Reference is to be made to the Quality Manual for details regarding the exemptions from the requirements of the standard
La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale
The validity of this certificate is dependent on an annual / six monthly audit and on a complete review, every three years, of the management system
L'uso e la validità del presente certificato sono soggetti al rispetto del documento RINA: Regolamento per la Certificazione di Sistemi di Gestione per la Qualità
The use and validity of this certificate are subject to compliance with the RINA document: Rules for the certification of Quality Management Systems
Prima emissione First Issue 07.01.2014
Emissione corrente Current Issue 03.12.2015
Data scadenza Expiry Date 15.09.2018
Luigi Fiato
Manager, Venezia (Marghera) Certification
RINA Services S.p.A.
Via Corsica 12 - 16128 Genova Italy
CISQ è la Federazione Italiana di Organismi di Certificazione dei sistemi di gestione aziendale
CISQ is the Italian Federation of management system Certification Bodies
Signatory of EA, IAF and ILAC Mutual Recognition Agreements



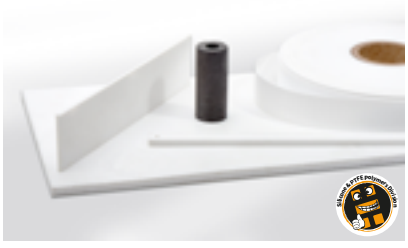
CERTIFICATO N. OHS-2556
CERTIFICATE No.
Si certifica che il Sistema di Gestione della Sicurezza e della Salute sul luogo di lavoro di
It is hereby certified that the Occupational Health and Safety Management System of
THE-MA S.R.L.
VIA DELLA REPUBBLICA ITALIANA 8 40061 MINERBIO (BO) ITALIA
nelle seguenti unità operative / in the following operational units
VIA DELLA REPUBBLICA ITALIANA 8 40061 MINERBIO (BO) ITALIA
VIALE LINO ZANUSSI, 6/C 33170 PORDENONE (PN) ITALIA
VIA COLONNELLO ANTONIO VARISCO, 22/A 35010 VIGONZA (PD) ITALIA
è conforme alla norma / is in compliance with the standard
BS OHSAS 18001:2007
E AL REGOLAMENTO TECNICO RT-12
per le seguenti attività / for the following activities
EA:14
COMMERCIALIZZAZIONE TRASFORMAZIONE E FUSTELLATURA DI NASTRI ADESIVI, BIADESIVI, GOMME GUARNIZIONI E MATERIALI ESPANSI.
TRADE, TRANSFORMATION AND DIE-CUTTING OF ADHESIVE TAPES, DOUBLE- SIDED ADHESIVE, RUBBER ITEMS , GASKETS AND FOAM
Per informazioni sulla validità del certificato, visitare il sito www.rina.org
For information concerning validity of the certificate, you can visit the site www.rina.org
La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale
The validity of this certificate is dependent on an annual / six monthly audit and on a complete review, every three years, of the management system
L'uso e la validità del presente certificato è soggetto al rispetto del documento RINA: Regolamento per la Certificazione dei Sistemi di Gestione della Sicurezza e Salute sul luogo di lavoro
The use and validity of this certificate are subject to compliance with the RINA document: Rules for the Certification of Occupational Health and Safety Management Systems
Prima emissione First Issue 07.01.2016
Emissione corrente Current Issue 07.01.2016
Data Scadenza Expiry Date 06.01.2019
Luigi Fiato
Manager, Venezia (Marghera) Certification
RINA Services S.p.A.
Via Corsica 12 - 16128 Genova Italy
CISQ è la Federazione Italiana di Organismi di Certificazione dei sistemi di gestione aziendale
CISQ is the Italian Federation of management system Certification Bodies
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

CERTIFICATO N. EMS-5263/S
CERTIFICATE No.
SI CERTIFICA CHE IL SISTEMA DI GESTIONE AMBIENTALE DI
IT IS HEREBY CERTIFIED THAT THE ENVIRONMENTAL MANAGEMENT SYSTEM OF
THE-MA S.R.L.
VIA DELLA REPUBBLICA ITALIANA 8 40061 MINERBIO (BO) ITALIA
NELLE SEGUENTI UNITÀ OPERATIVE / IN THE FOLLOWING OPERATIONAL UNITS
VIA DELLA REPUBBLICA ITALIANA 8 40061 MINERBIO (BO) ITALIA
VIALE LINO ZANUSSI, 6/C 33170 PORDENONE (PN) ITALIA
VIA COLONNELLO ANTONIO VARISCO, 22/A 35010 VIGONZA (PD) ITALIA
È CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD
ISO 14001:2004
E AL DOCUMENTO ACCREDIA RT-09
PER I SEGUENTI CAMPI DI ATTIVITÀ / FOR THE FOLLOWING FIELD(S) OF ACTIVITIES
EA:14
EA:29
COMMERCIALIZZAZIONE, TRASFORMAZIONE E FUSTELLATURA NASTRI ADESIVI, BIADESIVI, GOMME, GUARNIZIONI E MATERIALI ESPANSI.
TRADE, TRANSFORMATION AND DIE-CUTTING OF ADHESIVE TAPE, DOUBLE-SIDED ADHESIVE TAPE, RUBBER ITEMS, GASKETS AND FOAM.
Per informazioni sulla validità del certificato, visitare il sito www.rina.org
For information concerning validity of the certificate, you can visit the site www.rina.org
L'uso e la validità del presente certificato sono soggetti al rispetto del documento RINA: Regolamento per la Certificazione di Sistemi di Gestione Ambientale
The use and the validity of this certificate are subject to compliance with the RINA document: Rules for the Certification of Environmental Management Systems
La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale
The validity of this certificate is dependent on an annual / six monthly audit and on a complete review, every three years, of the management system
Prima emissione First Issue 23.12.2013
Emissione corrente Current Issue 02.12.2015
Data scadenza Expiry Date 15.09.2018
Luigi Fiato
Manager, Venezia (Marghera) Certification
RINA Services S.p.A.
Via Corsica 12 - 16128 Genova Italy
CISQ è la Federazione Italiana di Organismi di Certificazione dei sistemi di gestione aziendale
CISQ is the Italian Federation of management system Certification Bodies
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

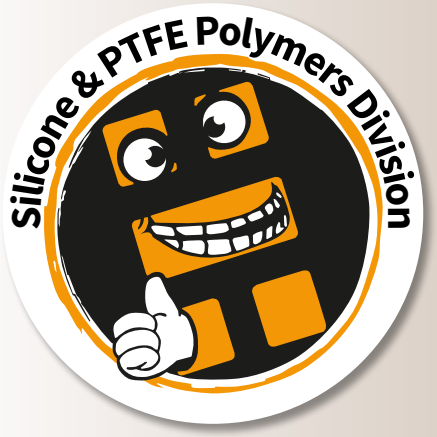
CERTIFICATO N. TS/30024/14
CERTIFICATE No.
SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI
IT IS HEREBY CERTIFIED THAT THE QUALITY MANAGEMENT SYSTEM OF
THE-MA S.R.L.
VIA DELLA REPUBBLICA ITALIANA 8 40061 MINERBIO (BO) ITALIA
NELLE SEGUENTI UNITÀ OPERATIVE / IN THE FOLLOWING OPERATIONAL UNITS
VIALE LINO ZANUSSI, 6/C 33170 PORDENONE (PN) ITALIA
E SITI REMOTI COME DA ALLEGATO 1 / AND REMOTE LOCATION AS FOR ANNEX 1
È CONFORME ALLA NORMA E AI REQUISITI DELLO SCHEMA
IS IN COMPLIANCE WITH THE STANDARD AND THE SCHEME REQUIREMENTS
IATF 16949:2016
PER I SEGUENTI CAMPI DI ATTIVITÀ / FOR THE FOLLOWING FIELD(S) OF ACTIVITIES
IAF:14
PRODUZIONE DI NASTRI ADESIVI, BIADESIVI, GOMME, GUARNIZIONI E MATERIALI ESPANSI TRAMITE FUSTELLATURA
PRODUCTION OF ADHESIVE TAPES, DOUBLE SIDED ADHESIVE, RUBBER, GASKET AND FOAM THROUGH DIE-CUTTING OPERATION
Riferirsi al Manuale della Qualità per i dettagli delle esclusioni ai requisiti della norma
Reference is to be made to the Quality Manual for details regarding the exemptions from the requirements of the standard
Essendo stato valutato in accordo alle "Regole per lo schema di certificazione IATF 16949 – 5° Edizione Novembre 2016"
Having been assessed in accordance with "IATF 16949 certification scheme – 5th Edition November 2016"
Enrico Colantoni
Venice Management System Certification, Head
Data di emissione Issue date 02.02.2018
Data di scadenza Expiry date 01.02.2021
RINA Services S.p.A.
Via Corsica 12 - 16128 Genova Italy
Consorzio CISQ Automotive
IL PRESENTE CERTIFICATO E' EMESSO IN CONFORMITÀ ALLE REGOLE IATF
THIS CERTIFICATE IS ISSUED IN CONFORMITY WITH THE IATF RULES
Per informazioni sulla validità del certificato, visitare il sito www.iatfglobaloversight.org
For information concerning the validity of the certificate, you can visit site www.iatfglobaloversight.org
La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale
The validity of this certificate is dependent on an annual/six monthly audit and on a complete review, every three years, of the management system
Certificato IATF n. IATF Certificate n. 0289016

THE-MA
offers the optimal solution for industrial applications for thermal and electrical insulation. Specialised in high quality products for protection from fire and high temperatures, semi-finished and finished products obtained from slabs and rods on specific customer design, fabrics, tapes, gaskets, packing, braids of various sizes, flexible hoses made to measure for the passage of aggressive liquids, vapours and hot air.

Our products are used in the Thermoelectric, Electrical Engineering, Glassworks, Iron and Steel, Aluminium, Ceramics, Heat Treatments, Fire Protection, Naval, Aeronautical, Medical, Chemical, Paper, Food, Textile and Automotive industries.



Professionalism, experience and service available for all your needs.



Films - Tapes
H.T. fabrics

GLASS

PTFE

KEVLAR®

UHMW

ALUMINIUM

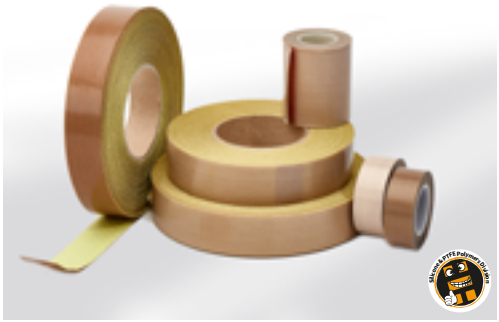
Glass fabrics coated with PTFE T.V.T.

WITH ADHESIVE, WITHOUT ADHESIVE AND IN AN ANTISTATIC VERSION

Our fibreglass fabrics are impregnated with PTFE or silicone either on both sides or on one side only.
Available in the antistatic version (black) and in the aramid fibre or Kevlar® + PTFE versions, coated with silicone or acrylic glue and protective liner. The choice of the type of adhesive is made mainly in relation to the temperatures of use.

Features
Resistance to high temperatures, 260°C,
low coefficient of friction, excellent resistance to chemical agents, excellent electrical insulation.
Aramid fibre version + PTFE: excellent mechanical, chemical and temperature resistance.

Application sectors
Packaging, film and plastic welding, textile and dye, electronics, aerospace, rubber, food, furniture industries.



PTFE GLASS FABRICS WITHOUT ADHESIVE

TYPE	THICKNESS mm	HEIGHT mm
y 3	0.076	1000/1500
y 5	0.130	1000/1500
y 6	0.150	1000/1500
y 10	0.250	1000/1500
y 14	0.360	1000/2000
y 20	0.50	2000
y 30	0.75	1780
y 37	0.95	1500
y 50	1.800	1000

PTFE GLASS FABRICS WITH ONE SIDE ADHESIVE

TYPE	THICKNESS mm	HEIGHT mm
y 3 AD	0.076	1000/1500
y 5 AD	0.130	1000/1500
y 6 AD	0.150	1000/1500
y 10 AD	0.250	1000/1500
y 14 AD	0.360	1000

ANTISTATIC PTFE GLASS FABRICS WITHOUT ADHESIVE

TYPE	THICKNESS mm	HEIGHT mm
y 3 C	0.076	1000
y 5 C	0.130	1000
y 6 C	0.150	1000
y 10 C	0.250	1000/2600
y 14 C	0.350	1000/2600
y 20 C	0.500	1000
y 30 C	0.700	2600

ANTISTATIC PTFE GLASS FABRICS WITH ONE SIDE ADHESIVE

TYPE	THICKNESS mm	HEIGHT mm
y 3 AD C	0.076	1000
y 5 AD C	0.130	1000
y 6 AD C	0.150	1000
y 10 AD C	0.250	1000

BREATHABLE PTFE GLASS FABRICS

TYPE	THICKNESS mm	HEIGHT mm
y 3-P	0.065	1000
y 5-P	0.130	1000
y 10-P	0.230	1000/1500
y 14-P	0.320	1000

PTFE KEVLAR FABRICS

TYPE	THICKNESS mm	HEIGHT mm
yk/as5	0.130	1250
yk 6	0.150	1250
yk 10	0.220	1000
yk 14	0.360	1900
yk 20	0.425	1600

yRVPTFE / yRKKevlar glass mesh tapes

OVEN CONVEYOR BELTS

Conveyor belts in glass or Kevlar® mesh impregnated with PTFE, also in the black antistatic version. Available to measure, prepared for jointing in place or in 50 m rolls in the available heights.

Application sectors
Tunnel ovens for heat treatments such as drying, shrink packaging, dyeing, screen printing.

KEVLAR® PTFE MESHES

TYPE	THICKNESS mm	HEIGHT mm
yRKK - 1x1	0.720	2300
yRKK - 4x3	0.870	3350
yRKK - 4x4	0.750	3350
yRKK - 5x5	1.252	3300

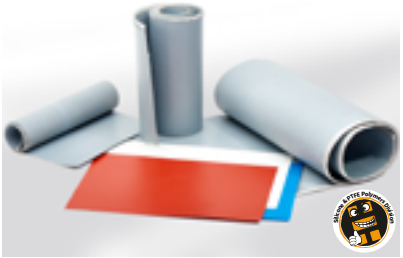
PTFE GLASS MESHES

TYPE	THICKNESS mm	HEIGHT mm
yRV - 1x1	0.750	3650
yRV - 2x2	0.800	3700
yRV - 4x4	0.900	3700
yRV - 5x5	1.000	3700
yRV - 6x6	1.200	3350

YS Silicone Glass Fabric

Available in rolls or tapes.

Application sectors
Customised packaging conveyor belts, oven curtains, food industry interleaving sheets, textile joints.



SILICONE GLASS FABRICS

TYPE	THICKNESS mm	HEIGHT mm
yS 020- W/R	0.230	1000
yS 025- W/R	0.280	1000
yS 035- W/R	0.350	1000
yS 056- W/R	0.560	1000
yS 076- W/R	0.760	1000
yS 100- Sil	0.950	1500

YSPECIAL SILICONE GLASS FABRIC

Silicone glass fabrics, one side PTFE. Available in H 1000 mm x 30 m
Silicone adhesive glass fabric reels for masking.

SILICONE GLASS FABRICS, ONE SIDE PTFE

TYPE	THICKNESS mm	HEIGHT mm
y3 T/S-AS	0.140	1000
y6 T/S	0.195	1000
y10 T/S	0.310	1000

SILICONE GLASS REELS FOR HVOF MASKING

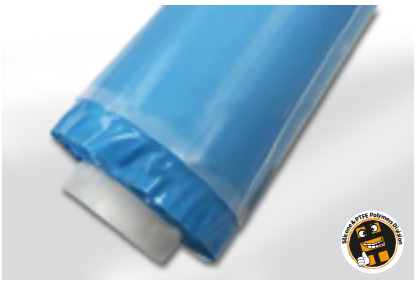
TYPE	THICKNESS mm	HEIGHT mm
YSIL10AD antifriction	0.245	from 20 to 1000
FR10AD flame retardant	0.280	from 20 to 1000

Polyolefin Film - yD-UHMW

ANTI-WEAR UHMV FILM

Very high molecular weight (UHMW) polyolefin film.
The main features of this product are the remarkable smoothness and the non-stickiness comparable to PTFE.
The high resistance to abrasion and impacts and the damping power of its surface make this product an excellent coating support for self-lubricated guides.
Supplied with acrylic adhesive and protective liner.

Application sectors
Among self-lubricating products, it is suitable for a wide range of applications in the most diverse industrial sectors.
The yD - UHMW film is suitable for non-stick and anti-freeze surfaces, bearing and sliding surfaces, the cement industry, the marble industry, in machine construction, hoppers, slides and conveyors, packaging machine industries, in plants in general.



YDW UHMW FILM

CODE	TYPE OF ADHESIVE	FILM THICKNESS		ADHESIVE THICKNESS		TOTAL THICKNESS		ADHESIVE STRENGTH	TENSILE STRENGTH	ELONGATION	TEMPERATURE °C	
		mil	*mm*	*mil*	*mm*	*mil*	*mm*	*N/cm*	*N/cm*	*%*	*Min*	*Max*
yD423-3	acrylic	3.0	0.076	1.5	0.038	4.5	0.114	3.8	35.00	300	-40	105
yD423-5	acrylic	5.0	0.127	1.5	0.038	6.5	0.165	4.9	70.01	350	-40	105
yD423-10	acrylic	10.0	0.254	1.5	0.038	11.5	0.292	5.5	140.20	425	-40	105
yD423-20	acrylic	20.0	0.508	1.5	0.038	21.5	0.546	5.5	254.00	500	-40	105

PTFE FILMS AND SHEETS

Films and sheets cemented on one side, prepared for bonding with two-component adhesives.

YFG 5030 PTFE FILM

THICKNESS	ROLL WIDTH	LENGTH
0.051 mm - 0.127 mm	500/1000 mm or to measure	30/33 m

PTFE ySK 6050 SHEET

THICKNESS	ROLL WIDTH	LENGTH
0.051 mm - 0.076 mm 0.127 mm - 0.254 mm	500/1000 mm or to measure	30/33 m

PTFE CALENDERED tapes

WITH ADHESIVE ON ONE SIDE, WITH OR WITHOUT PROTECTIVE LINER

Extreme chemical inertia, high temperature resistance, 260°C, excellent dielectric characteristics, self-lubricating properties and minimum friction coefficient, excellent resistance to ageing and solvents; no hygroscopicity.

YFG 6050AD PTFE CALENDERED FILM / yFG 6051AD

CODE	THICKNESS	ROLL WIDTH	LENGTH	ADHESIVE
yFG 6050AD	0.09 mm	400 mm or to measure	33 m	silicone or acrylic
yFG 6051AD	0.17 mm	320 mm or to measure	33 m	silicone or acrylic

SELF-ADHESIVE PTFE SHEET ySK6050 AD

CODE	THICKNESS	ROLL WIDTH	LENGTH	ADHESIVE
yFG 6050AD	0.051 mm - 0.076 mm 0.127 mm - 0.254 mm	1000 mm or to measure	30 m or to measure	silicone or acrylic

yD/lubritech PTFE

ANTI-FRICTION TAPES

Low friction and low wear tapes and coatings.
yd/lubritech is part of a series of materials formulated in PTFE and UHMW - PE, for the industry's most requested applications.
These high-performance tapes are used to lower the friction and reduce wear, combining high slip quality and chemical resistance.

Available in:
- format: rolls
- design details: washers, rings and guides.

These compounds can be printed on request and adhesive-coated on one side.
Each of the products in the series provides reliable and maintenance-free performance, where traditional lubricants would not be as efficient. Yd/lubritech materials can be used in applications from 0.254 to 1.625 mm, both static and dynamic.

yD/LUBRITECH PTFE

CODE	COMPOSITION	THICKNESS mm	COLOUR	ADHESIVE
yd 602	Glass + PTFE	from 0.254 to 1.625	Brick red	-
yd 602BT	Glass + PTFE	from 0.254 to 1.625	Brick red	silicone
yd 611	Carbon graphite	from 0.254 to 1.625	Black	-
yd 612	Graphite + PTFE	from 0.254 to 1.625	Black	-
yd 622	Mineral + PTFE	from 0.254 to 1.625	Turquoise	-
yd 631	Polymers + PTFE	from 0.254 to 1.625	Gold	-
yd 633	Polymers + PTFE	from 0.254 to 1.625	Dark green/brown	-
yd 635	Bronze + PTFE	from 0.254 to 1.625	Bronze	-
yd 645	PTFE	from 0.381 to 1.625	Pigmented green	-
yd 646	Mineral + PTFE	from 0.254 to 1.625	White/Turquoise	-

SPECIAL Tapes

yD/350 ALUMINIUM + PTFE

yD/350 is a non-pigmented PTFE coated aluminium sheet characterised by uniform thickness. It combines the properties of PTFE such as chemical resistance, high operating temperatures, low coefficient of friction and low dielectric constant.

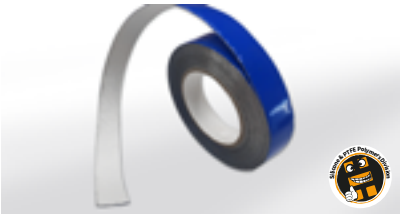
Application sectors
yD/350 is an excellent product for use in the manufacture of spiral tubes. PTFE is released during use and allows total removal after the sintering process. It could also be used as a release liner in manufacturing and conversion processes, in food packaging applications and as a protection in the electronics industry.

yD/350		
THICKNESS	ROLL WIDTH	MAX. OP. TEMP
0.120 mm - 0.133 mm	127 mm - 304 mm	260°C

yD/501 ALUMINIUM + SILICONE

yD/501 is an aluminium laminate, 0.100 mm thick, coated with blue silicone glass fabric, made for heavy-duty applications (HVOF). Supplied with a silicone adhesive on one side.

Application sectors
This tape is used as masking for HVOF plasma welding.



yD/501				
THICKNESS	WIDTH ROLL	LENGTH ROLL	ADHESIVE	MAX. OP. TEMP
0.460 mm	635 mm	16.5 m	silicone	260°C

yD/407 - yD/409 - yD/411 GLASS + ALUMINIUM INSULATION TAPES

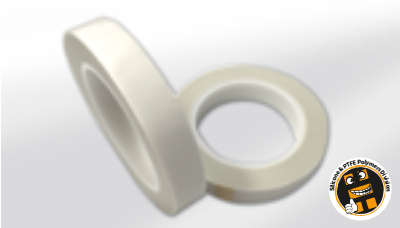
It is a laminated aluminium sheet coupled with a fibreglass fabric with a silicone adhesive resistant to high temperatures. The aluminium sheet provides excellent reflective and conductive characteristics in high temperature applications while the silicone adhesive supplies excellent adhesion at high temperatures and may be removed leaving all surfaces clean.

Application sectors
These adhesive tapes are mainly used for masking plasma processing. They are also used as heat protection in wiring.

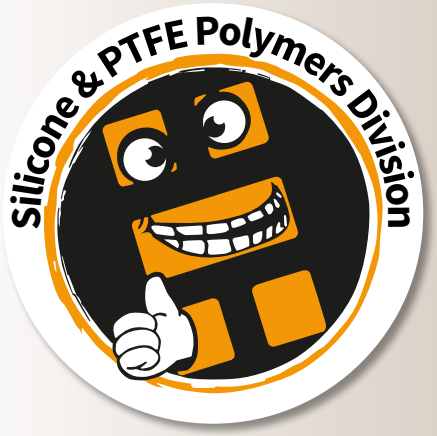
yD/407 - yD/409 - yD/411					
CODE	THICKNESS	WIDTH ROLL	LENGTH ROLL	ADHESIVE	MAX. OP. TEMP
yD/407	0.090 mm	635 mm	33 m	silicone	260°C
yD/409	0.110 mm	635 mm	33 m	silicone	260°C
yD/411	0.178 mm	635 mm	33 m	silicone	260°C

GLASS CLOTH TAPE yGH ADHESIVE - ADHESIVE GLASS TAPE

High quality glass tape, with excellent tensile strength, antifriction characteristics, excellent resistance to high temperatures, anti-impregnation, thermal insulation, flame retardant. Resistant to various thermal reactions, used for electrical insulation and insulation on electric motors. Available with adhesive on one side.



yGH									
CODE	ADHESIVE	THICKNESS	ADHESIVE STRENGTH	TENSILE STRENGTH	ELONGATION	TEMPERATURE °C	ELECTRICAL STRENGTH	WIDTH	LENGTH
		mm	*N/10mm*	*N/10mm*	*%*	*Max.*	*KV*	*mm*	*M*
yGH233	acrylic	0.120	3.3	262	5	156	3	500	33
yGH236H	silicone	0.175	4.2	262	5	200	3	500	33



Thermal insulators Gaskets

GLASS

CERAMIC

KEVLAR®

SILICA

TH-FLON

ARAMID JOINTS

MICA

GRAPHITE

Thermal insulators

TH500 FIBREGLASS

Type E fibreglass products for thermal insulation and thermal protection.



Main features:

- Colour: white and grey / black
- Inert to humidity
- Excellent thermal-electric insulation
- Working temperature 500°C, peak 550°C
- Good resistance to solvents and ultraviolet rays
- Good mechanical strength and adaptability
- Resistance to acids except phosphoric and hydrofluoric acid
- Complies with standards on incombustible materials according to DIN 4102 and with BS 476 on fire protection

FORMATS

CODE	TYPE
TH510	Twisted cord
TH520	Low density braided cable
TH530	High density braided cable
TH540	Filotto (Fibreglass yarn)
TH550	Round braid
TH560	Square and rectangular braid
TH570	Flat tape - Fabric
TH580	Protective sheath for rubber hoses
TH590	Tubular sleeves
TH590/S	Silicone tubular sleeve

TH3000 SILICA FIBRE

Silica fibre products for thermal insulation and protection.

Main features:

- Colour: white / ivory
- Inorganic, sterile, incombustible, asbestos-free, non-contaminating, non-toxic, does not contain heavy metals, does not cause irritation
- Stable at high temperatures
- Low thermal conductivity
- Good resistance to thermal shock
- Good mechanical strength and adaptability
- Good dimensional stability
- Good flexibility
- Good resistance to chemical agents
- Good mechanical strength
- Good resistance to abrasion
- Maximum operating temperature - peak: 1700°C
- Fibre diameter: 6 micron
- Reaction to fire: incombustible
- Shrinkage at 1100°C: approximately 5%

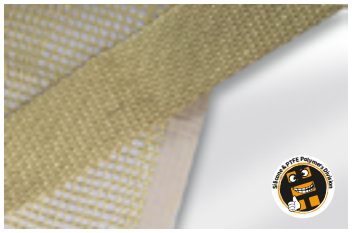
FORMATS

CODE	TYPE
TH3010	Twisted cord
TH3020	Braided cable
TH3040	Filotto (Fibreglass yarn)
TH3050	Round braid
TH3060	Square and rectangular braid
TH3070	Tape and strap
TH3080	Protective sheath for rubber hoses
TH3090	Tubular sleeves

THERMAL INSULATORS (KEVLAR®)

Main features:

- Colour: yellow
- Designed for the glass industry
- 100% ARAMID FIBRE products
- For thermal insulation and cut protection
- Stable at high temperatures
- Low thermal conductivity
- Good resistance to thermal shock
- Good dimensional stability
- Good flexibility
- Good resistance to chemical agents
- Excellent mechanical strength and adaptability
- Excellent resistance to abrasion and cutting
- Prevents product slippage
- Maximum temperature: 300°C

FORMATS

CODE	TYPE
TH910	Twisted cord
TH920	Braided cable
TH950	Round braid
TH960	Square and rectangular braid
TH970	Tape and strap
TH980	Protective sheath for rubber hoses
TH990	Tubular sleeves

Ceramic thermal insulators

ECO-FRIENDLY CERAMICS

ECOTHERM 1200 / GLASS REINFORCEMENT
ECOTHERM 1300 / INCONEL REINFORCEMENT
Products in eco-friendly ceramic fibre for
thermal insulation and thermal protection.

Main features:
- Maximum temperature 1260°C
- Colour: white
- Excellent thermal-electric insulation
- Compatible with DIN 4102 and BS 4676 standards on fire protection products

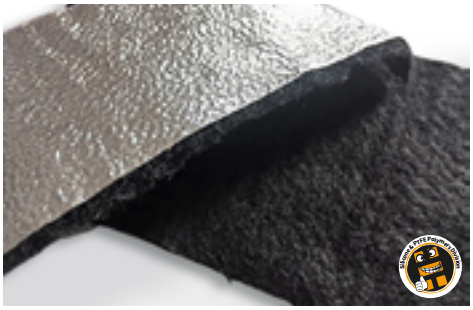
Fields of application
- Metallurgy
- Ceramics
- Naval industry
- Steam lines
- Furnaces
- Steelworks
- Thermal protections
- Thermal plants
- Foundries

FORMATS

CODE	TYPE
THcer 1210	Glass reinforced twisted cord
THcer 1310	Inconel reinforced cord
THcer 1250	Glass reinforced round braid
THcer 1350	Inconel reinforced round braid
THcer 1260	Glass reinforced square braid
THcer 1360	Inconel reinforced square braid
THcer 1270	Glass reinforced flat tape
THcer 1370	Inconel reinforced flat tape
THcer 1270	Glass reinforced fabric
THcer 1370	Inconel reinforced fabric
THcer 1280	Glass reinforced blanket
THcer 1380	Inconel reinforced blanket
THcer 1290	Glass reinforced sleeve
THcer 1390	Inconel reinforced sleeve

CARBOFELT - CARBON FELT

Carbon felt made of 100% pre-oxidised black polyacrylonitrile fibre.
Absolutely fireproof, fire resistant, does not drip and has a very low smoke emission. Withstands direct flames up to temperatures around 800°C for up to 5 minutes. It has good chemical resistance, in particular to alkalis, diluted acids and solvents.
Also available in a version aluminised on one side.



Fields of application
- Blast furnace separators
- Protection for equipment
- Thermal insulation for fumes
- Blankets and templates for welding
- Pipe insulation
- Heat insulation in steam lines
- Heat insulation in fuel lines
- Thermal insulators
- Insulation for blast furnace doors
- Protection from high heat sources
- Protection from fire caused by hazardous liquids
- Protection of flanges in glass processing industries
- Hydraulic line protection
- Protection for wires and cables
- Heat containment action
- Insulation for radiators
- High insulation of air ducts

Silica fibre and fibreglass mats

SILICA FIBRE MAT

SILICA FIBRE - 800°C
SILICYTHERM TH3000

Silice-800 products are made of continuous calcium silicate fibres with a filament diameter greater than 6 µm.

Main features:

- Resistance to temperatures up to approx. 800°C
- Exceptional electrical insulation properties
- High resistance to alkaline and acid products

TUFT AND NEEDLE MAT IN SILICYTHERM 800°C TYPE TH3000NA

Approx. thickness: 3-50 mm
Grammage: 300-8000 g/sq. m.

TIGHT-KNIT MAT IN SILICYTHERM 800°C TYPE TH3000NGMA

Approx. thickness: 4-12 mm
Grammage: 900-2900 g/sq. m.
Sewn with fibreglass yarn

550°C FIBREGLASS MAT

TH500 FIBREGLASS

E-Glass is the high-quality base for Thermo-E-Glass products. E-Glass has a high thermal resistance and exceptional electrical insulation properties. Thermo-E-Glass products are manufactured exclusively with continuous filament yarns <6µm. The insulating characteristics of the filaments can be improved by the texturing process.

Main features:

- Resistance to temperatures up to approx. 550°C
- Good insulation against heat and cold
- High tensile strength
- Not flammable
- Sound insulation

THERMO-E-GLASS TYPE NE TUFT AND NEEDLE MAT

Approx. thickness: 3-50 mm
Grammage: 300-8000 g/sq. m.
Also available in low emission and odourless version

THERMO-E-GLASS NGME TYPE TIGHT-KNIT MAT

Approx. thickness: 4-12 mm
Grammage: 900-2900 g/sq. m.
Sewn with fibreglass yarn

TH935 PARA ARAMID FELT

TH935 PARA ARAMID FELT

PARA ARAMID FELT

Thanks to its good anti-heat characteristics, it has been designed for protecting motors and installations for the production of heat-resistant and cut-resistant clothing (gloves, hoses, internal protective clothing); it is also suitable for the glass industry, for supporting and sliding glass sheets.
It has exceptional softness and flexibility features.

HT flexible hoses - Insulating sheaths

SL1HT RED TUBE

Flexible hose made of silicone-coated glass fabric, reinforced with internal harmonic steel spiral, reinforced with a silicone glass wire.

Main features
Lightweight, highly flexible hose, highly compressible (35% of the total), with good resistance to chemical agents and excellent resistance to low and high temperatures.

SL2HT RED TUBE

Flexible hose made of a double layer of silicon-coated glass fabric, reinforced with a harmonic steel spiral incorporated between the two layers, reinforced with a double silicone glass wire.

Main features
Lightweight, highly flexible hose, perfectly smooth inside, highly compressible; good resistance to chemical agents, excellent resistance to low and high temperatures, highly resistant to pressure, depression and abrasion compared with the SL1HT tube.

Fields of application
Aeronautics, aerospace, shipyards, chemical industries, paper mills, manufacturers of industrial furnaces, manufacturers of engines and special vehicles, electronics, refrigeration, heat engineering industries.

Technical characteristics
- Internal diameter: from 25 mm to 305 mm
- Length: 4 m
- Operating temperature: from -60°C to 300°C
- Flame resistant: non-flammable, DIN 4102 standards
- **Also available in PTFE fabrics, PTHT Havana and Neoprene, black NPHT**

INSULATING SHEATHS FOR COATING ELECTRIC AND HEAT PROTECTION CABLES

Resin-coated and silicone-coated fibreglass insulating sheaths for thermo-electric insulation, suitable for covering electrical cables.
The type E glass support guarantees heat resistance at high temperatures and high mechanical strength.
The external coating in resin or silicone gives the sheath a high degree of electrical insulation and high stability, preventing fraying. Internal diameters: from 0.5 mm to 30 mm.

FEATURES

CODE	INSULATING TREATMENT	MAX TEMPERATURE	MAX VOLTAGE KV	COLOUR
TH FS	none	500°C	-	White
TH FS SPC 1	resin-treated	250°C	1	Black
TH FS SILR 1.5	silicone	250°C	1.5	Red
TH FS SILR 2.5	silicone	250°C	2.5	Red
TH FS SILR 4	silicone	250°C	4	Red

YNSULFEX

YNSULFEX

Ynsulfex is a range of compensators made with special fabrics, suitable for high temperatures (up to 1400°C) and with an effective resistance to the chemical aggression of carrier fluids.

Generally installed in air or exhaust gas ducts, they can be used:
- to eliminate possible corrosion problems
- to contain thermal expansion
- to absorb vibrations
- to reduce noise.

Ynsulfex joints are divided into three types:
- standard LT type (for temperatures up to 500°C)
- standard HT type (for temperatures up to 1400°C)
- according to customer specifications.

Ynsulfex joints are made in sizes and sections of any shape, cylindrical, quadrangular and elliptical, for connecting tubes with different diameters.
Textile joints are used in the chemical and metallurgical industries as well as in refineries, cement plants, thermal power plants, glassworks, incinerators and air conditioning systems.

YNSULPOWER ™

YNSULPOWER ™

To solve problems of thermal and acoustic insulation in the power generation sector, we have created YnsulPower, innovative and successful textile covers useful:
- to improve accident prevention for personnel
- to shorten work execution times
- to contain plant management costs
- to reduce labour costs.

Ynsulpower covers are:
- ideal for maintenance of tubes, manifolds, mufflers and turbines;
- made in any shape, with newly developed fabrics and felts including for applications above 800°C;
- applicable in critical situations that provide little space.

In the presence of salt aggressions, Ynsulpower insulating covers can be designed with stainless steel finishes.

Gaskets

PTFE GASKETS

We make gaskets in PFTE and PTFE loaded according to UNI ASA and designed to the customer's specification.

TH-FLON QUICK GASKET

QUICK gasket in 100% virgin PTFE, FLAT WITH SELF-ADHESIVE SIDE AT THE BACK

Gasket made of 100% soft PTFE treated with tetrafluoroethylene. High mechanical characteristics, excellent flexibility, good resistance to chemicals and high temperatures. Economical and easy to use.

Installation

100% Virgin PTFE tape, soft, conformable, to be installed on flanges or vertical surfaces, thanks to the self-adhesive back which ensures easy adhesion.

Main features:

- 100% virgin PTFE
- Pressure up to 200 Kg/cm^2
- Operating temperature: –200°C + 260°C
- Inert to all chemicals
- Suitable for contact with food
- Does not deteriorate over time
- Long duration
- No material wasted with cutting
- Time and costs for cutting are avoided
- Minimum inventory quantities
- Long storage life
- Easy to use thanks to its self-adhesive back
- Self-adhesive
- Easy to install
- Quick maintenance
- Easy to remove
- It levels irregularities in the surfaces of the flanges
- Extreme compressibility

MEASURES	
mm	**m**
3 × 1.5	50
5 × 2	50
7 × 2.5	25
10 × 3	25
12 × 4	25
14 × 5	25
17 × 6	25
20 × 7	25

Aramid joints

TH9200/TH9200G ARAMID ASBESTOS FREE JOINT

COMPOSITION
Aramid fibre joint, mineral and inorganic fibres, mixed with NBR synthetic elastomer, with graphite-free non-stick surface. Type TH9200G with graphite.

Main features:
- Colour: TH9200 Green, TH9200 Graphite
- Max. Operating Temperature: 180°C
- Max. Operating Pressure: 70 bar
- Thicknesses: 0.5 - 5 mm
- Format: 1500 × 1500

TH9400 MINERAL/ARAMID ASBESTOS FREE JOINT

COMPOSITION
Joint in mineral fibre for high temperatures and aramid fibres, mixed with high quality NBR synthetic elastomer. Non-stick surface.

Main features:
- Colour: light blue
- Max. Operating Temperature: 350°C
- Max. Operating Pressure: 100 bar
- Thicknesses: 0.5 - 5 mm
- Format: 1500 × 1500

TH9400M MINERAL/ARAMID/REINFORCED ASBESTOS FREE JOINT

COMPOSITION
Joint in mineral fibre for high temperatures and aramid fibres, mixed with high quality synthetic elastomer and reinforced with wire mesh. Non-stick surfaces, impregnated with graphite on both sides.

Main features:
- Colour: black
- Max. Operating Temperature: 400°C
- Max. Operating Pressure: 120 bar
- Thicknesses: 0.5 - 5 mm
- Format: 1500 × 1500

Applications
Industrial, cold and hot water, steam, oils, fuels, non-aggressive chemical gases applications.

Special gaskets

THGRM900XX

Joints for gaskets based on Mica -200 ° C + 900 ° C. Flexible or sturdy slabs reinforced with a 316 stainless steel mesh inside, made with minerals impregnated with silicone elastomers, for use at very high temperatures even in the presence of air or of other oxidising fluids. Slab joints based on muscovite or phlogopite mica, impregnated with a mixture of silicone elastomers resistant to high temperatures. Flexible, mechanically robust, they have excellent thermal, chemical and electrical resistance properties. The material is totally fireproof and naturally non-toxic, with a lamellar and non-fibrous structure. Easily cut and handled.

Applications

Recommended for flat gaskets at very high temperatures, even in the presence of air or of other oxidising fluids. Suitable for ANSI and DIN flanges, automotive applications, equipment subject to thermal shocks; suitable for oils, fuels and most chemicals, including alcohols, solvents, alkalis and acids, with the sole exception of hydrofluoric acid.

THGRTF1000XX

THGRTF1000xx is a revolutionary material for gaskets, obtained from peeled vermiculite through a chemical and thermal process. The material simulates the structure of expanded graphite, with a notable exception: it maintains its integrity in an extreme range of temperatures, even in an oxidising environment. The chemical composition of vermiculite is in fact based on silica which, unlike carbon, does not react with oxygen. Other advantages compared with graphite are the greater robustness, the property of electrical and thermal insulation, the absence of any trace of sulphur, the absence of dust release. THGRTF1000xx thus presents itself as the most complete and versatile material for the most critical industrial applications. THGRTF1000xx is the slab version without binders for maximum thermal resistance, reinforced with 316 steel sheet, for producing flat gaskets. Temp. –-200°C + 980°C

Joints in pure graphite

TH9000 EXPANDED GRAPHITE

COMPOSITION

Joint made of pure graphite, foamed and laminated to a high-purity standard. Very high quality. Non-stick surfaces.

Main features

- Suitable for high temperatures at medium pressures
- Colour: graphite black
- Max. operating temperature: -200°C +400°C
- Thicknesses: 1-1.5-2-3 mm
- Max. operating pressure: 80 bar
- Format: 1000 x 1000 mm

TH9000R-TH9000RR REINFORCED EXPANDED GRAPHITE

COMPOSITION

Joint made of pure graphite, foamed and laminated to a high-purity standard. Very high quality. Non-stick surfaces.

TH9000R With insertion of a sheet of stainless steel 316 0.05 mm thick Max. operating pressure: 140 bar.

TH9000RR With insertion of a sheet of stainless steel 316 0.01 mm thick Max. operating pressure: 200 bar.

Main features

- Suitable for high temperatures at medium pressures
- Colour: graphite black
- Max. operating temperature: -200°C +450°C
- Thicknesses: 1-1.5-2-3 mm
- Format: 1000 x 1000 mm

Plastic Materials

PA6

POM C

PET

PEEK®

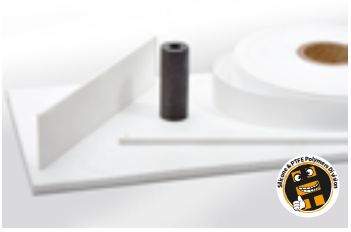
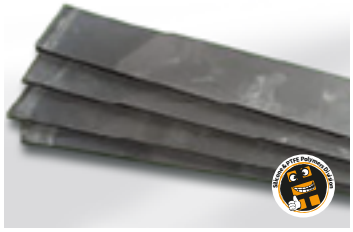
PEHD

PTFE

PC

PMMA

Industrial plastics


THIS SHEET DETAILS THE MAIN PLASTIC SEMI-FINISHED PRODUCTS USED IN THE MACHINE INDUSTRY IN SHEET, RODS AND PIPE FORMATS

PRODUCT	PHYSICAL CHARACTERISTICS	USE
PA6 **Polyamide 6** Natural, black	Good resistance to wear, impact, vibration and chemical agents, good electrical insulation, mechanical strength, perfectly balanced hardness and rigidity.	Multi-purpose material for mechanical and engineering use; material compliant with food contact according to FDA regulations. Temp. -40 + 80 °C
PA6 + MOS 2 **Polyamide + bisulph/ molib** Black	The modified crystal structure due to the "nucleating" effect of Molybdenum disulphide improves the dimensional stability of this modified PA6. Increased stiffness increases anti-wear properties. Good sliding characteristics.	Bushings, racks, anti-wear guides, screws, bearings. Temp. -20 + 95°C
PA6.6 + GF30 **Polyamide + fibreglass** Black	Fibreglass gives this extruded material greater mechanical tensile strength, rigidity, hardness and dimensional stability. Good resistance to abrasion and to high temperatures.	Parts subjected to thermal, mechanical and electrical stresses. Temp. -20 + 110°C
PA6G **Cast polyamide** Natural, black and other colours	Excellent mechanical, thermal and chemical resistance. Excellent PV property and resistance to large loads, wear and abrasion. Good dimensional stability.	Suitable for all bearing applications. Cast nylon is generally accepted as the primary technical polymer. As it boasts polymerisation conditions, it is possible to change the mechanical characteristics, adapting it to specific applications, or to increase the yield, adding additives, lubricants or dyes. Temp. -30 + 105°C
POM C **Acetal resin** White, black, blue on request	This copolymer is an ideal combination of stiffness, resistance to wear, low hygroscopicity. It is easily worked. Good dimensional stability. High resistance to hydrolysis, strong alkalis, thermal-oxidative degradation. High impact resistance, flow, low water absorption, good dielectric and electrical insulation properties.	Food sector, parts in contact with foodstuffs, shelves, scrapers, medical applications. Suitable for processing with tight tolerances. Temp. -40 + 115°C
POM H **Acetal homopolymer** White, black	The homopolymer reaches the highest mechanical properties in terms of hardness, stiffness and creep resistance. Compared with the acetal copolymer, POM H has a high wear resistance with the lowest coefficient of linear thermal expansion.	Mechanical parts, dimensionally stable precision parts. It is used in contact with foodstuffs and as an electrical insulator. Parts of chemical plants. Temp. -50 + 105°C
POM CGF **Polyacetal copolymer + 30% fibreglass** White, black	Reinforced with fibreglass to obtain higher mechanical properties, stiffness and stability. It also has greater heat resistance.	Temp. -20 + 115°C

Industrial plastics

PRODUCT	PHYSICAL CHARACTERISTICS	USE
PET **Polytetrafluoroethylene** White, black	It has an exceptional dimensional stability, low water absorption, low thermal expansion, combined with high mechanical resistance, creep and wear resistance, good electrical insulation and chemical resistance.	Used in the chemical, electrical, food, medical and paper industries. Suitable for precision mechanical parts subjected to large loads and in abrasive environments. Temp. -20 + 115°C
PEEK **Polyetheretherketone** Natural (brownish grey), black	High impact resistance, mechanical strength, creep stiffness, hardness even at high temperatures. Excellent chemical and hydrolysis resistance. Excellent behaviour in case of wear and friction (in particular for PEEK - HPV and CA 30). Very good dimensional stability; low intrinsic flammability and very low smoke emission during combustion; good dielectric and electrical insulation properties (except PEEK - HPV and CA 30); excellent resistance to strong energy radiation (gamma rays and X-rays). High maximum temperature in air usage (250°C continuously, up to 310°C for short periods).	The raw material used for the production of semi-finished products in natural PEEK complies with the directives of the European Union and the American FDA which refer to plastic materials used in contact with food substances. These characteristics, combined with excellent sterilisation by means of steam, dry heat, acetylene oxide and gamma rays, make this product ideal for applications in the medical, pharmaceutical and food sectors. Parts which require excellent mechanical and temperature resistance. Max. continuous temperature 250°C, minimum 60°C
PE HD **UHMW polyethylene** White, black, green	Low friction coefficient, low specific weight, suitable for contact with food, excellent resistance to low temperatures, easy workability with machine tools.	Sliding guides for industrial plants, parts for food machines, worktops, parts for bottling plants. Temp. -50 + 80°C
PTFE **Polytetrafluoroethylene** White	Excellent chemical resistance, excellent workability with machine tools.	Parts which require good chemical resistance. FDA Cert. Temp. -60° + 260 °C
PC **Polycarbonate** Natural (translucent)	The impact-resistant transparent material par excellence (very high impact resistance even at low temperatures), great mechanical resistance, good creep resistance, rigidity retention in a wide range of temperatures; very good dimensional stability; translucent, good dielectric and electrical insulation properties, physiologically inert (suitable for contact with food). These are semi-finished products in polycarbonate not stabilised against UV rays, marketed under the PC1000 name, virgin grade.	Transparent unbreakable protections, in the mechanical and construction sector; food industry.
PMMA **Polymethylmethacrylate** Transparent, milky	Excellent optical and mechanical properties, excellent transparency and gloss, great resistance to UV rays, atmospheric agents and wear. Excellent thermal, acoustic and electrical insulation capacity; excellent thermal stability; low water absorption. The physical, mechanical and colour characteristics remain unchanged for years. They may come into contact with foodstuffs in compliance with all current European food control legislation. They do not contain toxic materials or heavy metals that can damage the environment or health. Insoluble in water.	Used in the construction of advertising displays, advertising panels and signs, in interior design, in the nautical sector, for protective safety screens, acoustic barriers, parts for the industry, machine components, lighting, bathroom fixtures.

PTFE / PTFE filled semi-finished products

GLASS

High wear resistance, chemical inertia (excluding alkalis and hydrofluoric acid).

CHARCOAL

Good thermal conductivity, good resistance to wear, limited resistance to oxidising chemicals.

GRAPHITE

Good wear resistance.

MOLYBDENUM DISULPHIDE

Low static friction coefficient with small specific loads, moderate wear resistance.

BRONZE

High compressive strength, very low wear, limited resistance to chemicals.

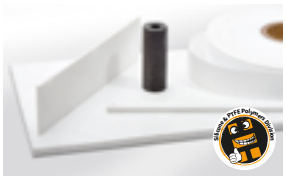
STAINLESS STEEL

High resistance to compression, high resistance to chemical agents, absence of electrostatic charges.

PTFE formats, sizes and types

SLAB FORMAT - THICKNESSES: FROM 2 TO 50 MM

600 x 600 mm
1200 x 1200 mm
1000 x 2000 mm



SHEET FORMAT - THICKNESSES: FROM 0.10 TO 1 MM

Height 1200 mm, length depends on the thickness,
minimum supply from 10 to 20 kg.

ROD FORMAT

Diameter from 10 to 200 mm, length from 1 to 2 m.

TUBE FORMAT

Length from 1 to 2 m

SLEEVE FORMAT

Length from 200 to 300 mm.

PTFE small and spaghetti-shaped tubes

THIN WALL SMALL TUBE

Internal diameter from 1.5 to 26 mm, thickness from 0.5 to 3 mm.

Applications

- Transport of fluids, gas, steam, hot water, acids and other materials
- Food & beverage
- Domestic appliances
- Electronics
- Automotive and motorcycle sectors
- Medical and laboratory plants
- Chemistry
- Semiconductors
- Distribution of technical articles.

MEASURES

DIMENSIONS mm	WALL THICKNESS mm	DESCRIPTION	QUANTITY m
1	0.5	PTFE thin wall tube 1x2	200.00
1	1	PTFE thin wall tube 1x3	100.00
2	1	PTFE thin wall tube 2x4	100.00
3	1	PTFE thin wall tube 3x5	100.00
4	1	PTFE thin wall tube 4x6	100.00
4	1	PTFE thin wall tube 4x8	100.00
5	1	PTFE thin wall tube 5x7	100.00
6	1	PTFE thin wall tube 6x8	100.00
6	1	PTFE thin wall tube 6x10	100.00
7	1	PTFE thin wall tube 7x9	100.00
8	1	PTFE thin wall tube 8x10	100.00
9	0.5	PTFE thin wall tube 9x10	100.00
10	1	PTFE thin wall tube 10x12	100.00
10	2	PTFE thin wall tube 10x14	100.00
11	1	PTFE thin wall tube 11x13	100.00
11	2	PTFE thin wall tube 11x15	100.00
12	1	PTFE thin wall tube 12x14	100.00
13	1	PTFE thin wall tube 13x15	50.00
14	2	PTFE thin wall tube 14x18	50.00
15	1	PTFE thin wall tube 15x17	50.00
16	1	PTFE thin wall tube 16x18	50.00
16	2	PTFE thin wall tube 16x20	50.00
17	1.5	PTFE thin wall tube 17x20	50.00
18	1	PTFE thin wall tube 18x20	30.00
18	2	PTFE thin wall tube 18x22	30.00
20	2	PTFE thin wall tube 20x24	30.00
21	1.5	PTFE thin wall tube 21x24	10.00
22	1	PTFE thin wall tube 22x24	10.00
24	1.5	PTFE thin wall tube 24x27	10.00
25	1.5	PTFE thin wall tube 25x28	10.00

Flexible hoses Fittings

STAINLESS STEEL

COMPOSITES

Stainless steel flexible hoses

TCX 500 STAINLESS STEEL COAXIAL FLEXIBLE HOSES
FLEXIBLE CORRUGATED STAINLESS STEEL HOSES WITH EXTERNAL SHEATH IN TCX 400 STAINLESS STEEL

COAXIAL flexible hoses consist of an inner tube, which carries the fluid to be transferred, and an external tube, which conveys the heating or cooling fluid.
The coaxial hose is often used as a safety tube; in this case a precision glycerine bath-like pressure gauge resistant to vibrations is connected to the external hose.
The pressure gauge will indicate the air pressure existing in the chamber between the inner tube and the outer hose, which under normal conditions will show 0. In the event of minimal leakage or loss from the inner tube, the pressure gauge will immediately indicate a pressure other than 0.
Operating temperature for hoses with interior tubing in stainless steel: from –270° C to + 800°C.

Main applications
As they are perfectly sealed, they are used in the chemical, petrochemical, nuclear, pharmaceutical industries, in sectors for the transfer of viscous fluids or those sensitive to temperature variations such as waxes, paraffin, bitumen, chlorophenol, fats, oils, polyester, italic acid, resins synthetic, phenol, fatty acids, chocolate, explosive products, thermoplastics.
They also guarantee maximum safety for transferring dangerous products as well as maximum safety as regards non-contamination in the event of accidental leaks.

MEASURES
Nominal diameter from 1/2" to 6"
Length on request

FITTINGS
Rotating flange
Fixed flange
Other types on request

TCX 500

TCX 400

Composite flexible hoses

PP / SOLVENT - PTFE / FLON COMPOSITE HOSE

Temperature: -20°C / +100°C
Testing: hydraulic test at 15 bar (BS 5842), upon request 1.5 for operating pressure. Electrical continuity test between the connections.
Each hose has an identification code to guarantee traceability. Safety: minimum burst pressure 4 x PE in accordance with BS5173.
Safety factor 4: 1. All Tests are performed at room temperature.
Fittings: the series of fittings is available in BRASS, AISI 316L and CARBON STEEL.
Galvanised steel clamping rings and NBR gaskets. Other materials on request.

PP/SOLVENT

Construction: POLYPROPYLENE substrate and external cover in non-abrasive material.

Spirals
PP/PG Internal lining in STEEL, coated PP, external cover in GALVANISED STEEL
PP/PS Internal lining in STEEL, coated PP, external cover in STAINLESS STEEL
PP/SG Internal lining in STAINLESS STEEL, external cover in GALVANISED STEEL
PP/SS Internal lining in STAINLESS STEEL, external cover in STAINLESS STEEL

Applications
Excellent handling characteristics, flexibility and lightness, ideal for applications during loading / unloading road and rail tankers for transferring incoming and outgoing chemical products, solvents and acids. It is commonly used by the most important chemical industries and carriers. Also available in the Mariner version for heavy-duty applications such as ship unloading.

PTFE/FLON

Construction: PTFE substrate and external cover in non-abrasive material.

Spirals
PTFE / GG inside, GALVANISED STEEL outside
PTFE/SG Internal lining in STAINLESS STEEL, external cover in GALVANISED STEEL
PTFE/SS Internal lining in STAINLESS STEEL, external cover in STAINLESS STEEL

Applications
Excellent handling characteristics, flexibility and lightness, ideal for transferring incoming and outgoing aggressive chemical products, penetrating solvents and acids. PTFE is generally used where PP is inadequate. PTFE / GG, SG, SS combine the chemical properties of PTFE with high heat resistance. Common applications are liquid sulphur and bitumen. The temperature limit depends on the fluid and the operating pressure. It is commonly used by the most important chemical industries and carriers. Also available in the Mariner version for heavy-duty applications such as ship unloading

PTFE/FLON

DIMENSIONS		OPERATING PRESSURE	BURST PRESSURE	BENDING RADIUS	WEIGHT	MAX. LENGTH
Inches	*mm*	*bar*	*bar*	*mm*	*Kg/m*	*M*
1"	25	14	56	100	0.8	20
1.1/2"	38	14	56	140	1.2	20
2"	50	14	56	180	1.9	20
2.1/2"	65	14	56	205	2.5	20
3"	75	14	56	280	3.0	20
4"	100	14	56	395	4.8	20
6"	150	14	56	510	10.7	20
8"	200	14	56	760	15	20
10"	250	10.5	42	915	20.5	12

The data contained in these sheets represent the average values found in production.

Quicky quick fittings

Female threaded male

Male threaded male

Male for flexible hoses

Male for welding

Flanged male

Male cap

Female threaded female

Female threaded male

Female for flexible hoses

Female for welding

Flanged female

Female cap

... your business allies

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