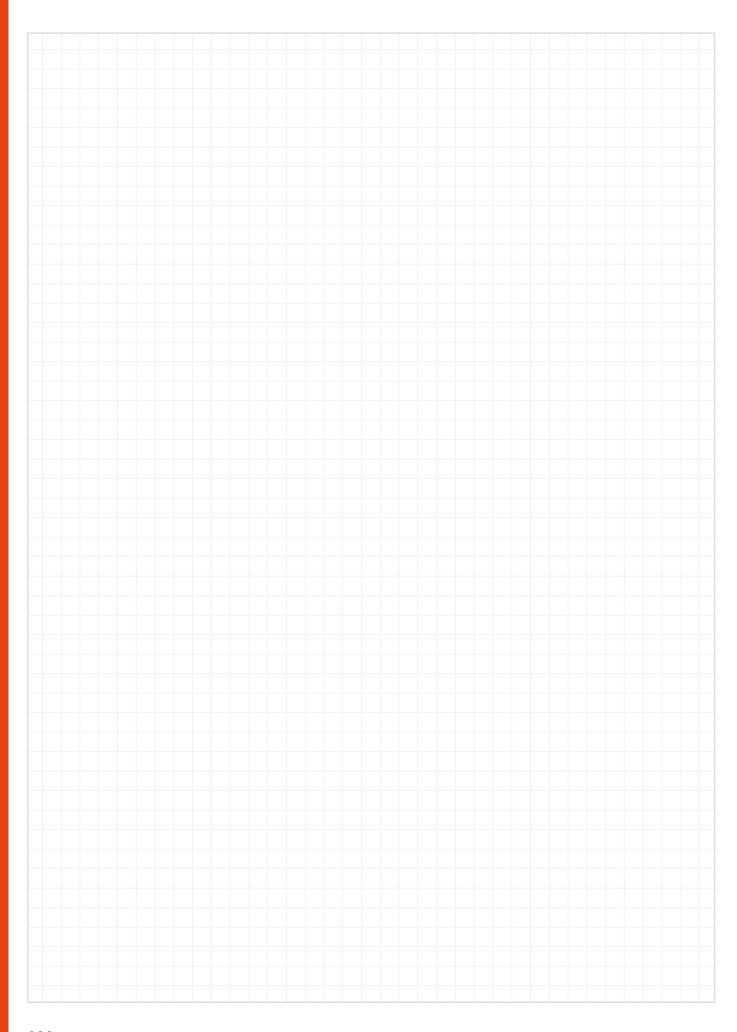
# My sketches





# iglidur® low-friction tribo-tape

Choice of 4 materials

Lubrication and maintenance-free

Wear-resistant

Easy to cut

Available with/without adhesive surface

Standard widths from stock



### iglidur® tribo-tape | Advantages

Versatile: iglidur® tribo-tape



### Material: iglidur® A160

- Low coefficient of friction
- Wear resistance: ++
- Up to +90°C
- ➤ Page 696



### Material: iglidur® B160

- For use in visible areas
- Wear resistance: ++++
- Up to +90°C
- ► Page 697

# Easy-to-fit protection for all surfaces: iglidur® tribo-tape

igus® tribo-tape is designed for lining areas of wear and where frequent maintenance is required, an example is for machine beds etc. At just 0.5mm thick (0.71mm including the adhesive back), the space requirement is extremely low. The ease of use (the tape can simply be cut using scissors) and optional self-adhesive back open up almost endless possibilities for the product's use.

- Lubrication and maintenance-free
- Easy to cut
- For compact areas
- With or without self-adhesive back
- Standard widths from stock
- Individual required widths in continuous range from 10-500mm



### Material: iglidur® W160

- White and UV-stabilised
- Wear resistance: +++
- Up to +90°C
- ► Page 698



Available from stock

Detailed information about delivery time online.



### Operation temperatures:

iglidur® A160: -50°C up to +90°C iglidur<sup>®</sup> B160: -50°C up to +90°C iglidur® W160: -50°C up to +90°C

iglidur<sup>®</sup> V400: -50°C up to +200°C

Differing temperatures with adhesive back (see product page)



### Product film

www.igus.eu/tape-film



#### Material: iglidur® V400

- High media resistance
- Wear resistance: +++++
- Up to +200°C (with adhesive back, see product page)
- ➤ Page 699



#### **Cutting service**

Whether as a specially tailored by-the-metre product or freely designed pre-cut parts: We produce your required product in required width from our iglidur® tribo-tape. Please contact us!

www.igus.eu/tape-cut-to-size

## iglidur® tribo-tape | Technical data

iglidur® tribo-tape

### Material properties

General properties	Unit	iglidur® A160	iglidur® B160	iglidur® W160	iglidur® V400	Testing method
Density	g/cm <sup>3</sup>	1.00	1.00	0.95	1.51	
Colour		blue	black	white	cream- white	
Max. moisture absorption at +23°C/50% r. h.	% weight	0.1	0.1	0.1	0.1	DIN 53495
Max. total moisture absorption	% weight	0.1	0.1	0.1	0.2	
Coefficient of sliding friction, dynamic, against steel	μ	0.09- 0.19	0.13- 0.20	0.12- 0.20	0.15- 0.20	
Mechanical properties						
Flexural modulus	MPa	1,151	852	799	4,500	DIN 53457
Flexural strength at +20°C	MPa	19	14	14	95	DIN 53452
Shore D hardness		60	59	58	74	DIN 53505
Physical and thermal properties						
Max. long-term application temperature	°C	+90	+90	+90	+200	
Max. short-term application temperature	°C	+100	+100	+100	+240	
Min. continuous application temperature	°C	-50	-50	-50	-50	
Thermal conductivity	W/m $\cdot$ K	0.30	0.32	0.30	0.24	ASTM C 177
Coefficient of thermal expansion (at +23°C)	$K^{-1} \cdot 10^{-5}$	111	111	111	3	DIN 53752
Electrical properties						
Specific contact resistance	$\Omega cm$	> 1012	> 1012	> 1012	> 1012	DIN IEC 93
Surface resistance	Ω	> 1012	> 1012	> 1012	> 1012	DIN 53482

Table 01: Material properties table

### Chemical resistance (at +20°C)

Chemical resistance	iglidur® A160	iglidur® B160	iglidur® W160	iglidur® V400
Alcohols	+	+	+	+
Hydrocarbons	+	+	+	+
Greases, oils without additives	+	+	+	+
Fuels	+ up to 0	+ up to 0	+ up to 0	+
Diluted acids	+	+	+	+
Strong acids	+	+	+	+
Diluted alkalines	+	+	+	+
Strong alkalines	+	+	+	_
Radiation Resistance [Gy] up to	1 · 10 <sup>5</sup>	1 · 105	1 · 105	2 · 104

+ resistant 0 conditionally resistant - not resistant All data given at room temperature [+20°C]



Unknown factors, temperatures, wet weather and many other ambient conditions impair the adhesion. It is therefore essential that the use of iglidur® tribo-tape be tested under realistic conditions. We are happy to provide you with samples for tests. All recommendations, as well as suggestions regarding use that are made, are based on experience gained in practice and tests where the basic conditions cannot be applied to other conditions of use. They are therefore not binding and do not release the buyer from the obligation to carry out his/her own tests. We always recommend application-specific tests under real conditions of use.



# iglidur® liners | Selection according to main criteria

iglidur <sup>®</sup>	A160	B160	W160	V400
Technical specifications				
Wear resistance at +23°C				
Wear resistance at +90°C				
Wear resistance at +150°C				
Low coefficient of friction				
Low moisture absorption				
Wear resistance under water				
High media resistance				
Resistant to edge loads				
Suitable for shock and impact loads				
Resistant to dirt				
Price index <sup>141)</sup>				
For high loads (> 60MPa)				
Electrically conductive				
Approvals and standards				
FDA-compliant	•			
EU 10/2011-compliant	•			
Fire class in accordance with UL-94	HB	НВ	HB	V-0
Mould test DIN EN ISO 846				
Fogging DIN 75201-B				
Availabilities / variants		·		
Bar stock, round material	•			
Bar stock, tube				
Bar stock, plate				
Machined made from bar stock	•			
tribo-tape liner	•		•	•



# iglidur® liners | Material properties table

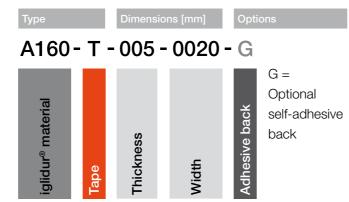
iglidur <sup>®</sup>	Unit	A160	B160	W160	V400	
General properties						
Density	[g/cm³]	1.00	1.00	0.95	1.51	
Colour						
Max. moisture absorption at +23°C/50% r. h.	[% weight]	0.1	0.1	0.1	0.1	
Max. total moisture absorption	[% weight]	0.1	0.1	0.1	0.2	
Coefficient of sliding friction, dynamic, against steel	[µ]	0.09- 0.19	0.13- 0.20	0.12- 0.20	0.15- 0.20	
Mechanical properties						
Flexural modulus	[MPa]	1,151	852	799	4,500	
Flexural strength at +20°C	[MPa]	19	14	14	95	
Compressive strength	[MPa]	37	37	37	47	
Max. permissible surface pressure at +20°C	[MPa]	15	11	11	45	
Shore D hardness		60	59	58	74	
Physical and thermal properties						
Max. continuous operating temperature	[°C]	+90	+90	+90	+200	
Max. short-term operating temperature	[°C]	+100	+100	+100	+240	
Min. continuous operating temperature	[°C]	-50	-50	-50	-50	
Thermal conductivity	[W/m·K]	0.30	0.32	0.30	0.24	
Coefficient of thermal expansion at +23°C	[K⁻¹ · 10⁻⁵]	111	111	111	3	
Electrical properties						
Specific contact resistance	[Ωcm]	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 1012	
Surface resistance	[Ω]	> 1012	> 1012	> 1012	> 1012	
Page		696	697	698	699	

# iglidur® tribo-tape | Product range

FDA-compliant - iglidur® A160







The low-cost iglidur® A160 tribo-tape has high wear resistance compared to similar, thin plastic products.

tribo-tape from iglidur® A160 with adhesive back Temperature -40°C up to +90°C

### Dimensions [mm]

Material thickness without adhesive back	Material thickness with adhesive back	Width ±1.0	Part No. without adhesive	Part No. with adhesive back
±0.1	±0.121		back	
0.5	0.71	20	A160-T-005-0020	A160-T-005-0020-G
0.5	0.71	50	A160-T-005-0050	A160-T-005-0050-G
0.5	0.71	100	A160-T-005-0100	A160-T-005-0100-G
0.5	0.71	500	A160-T-005-0500	A160-T-005-0500-G
1.0	1.21	500	A160-T-010-0500	A160-T-010-0500-G



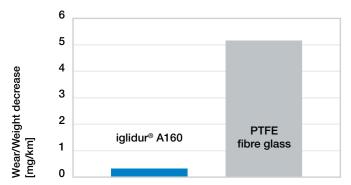
Individual widths upon request Continuously from 10-500mm



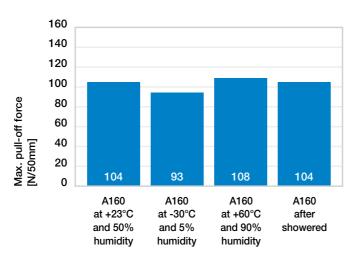
**Cutting service** 

Design tribo-tape flexibly

www.igus.eu/tape-cut-to-size



Linear wear against stainless steel pin (AISI 303) F = 10N, v = 9,600mm/min



180° pull-off test after various exposure conditions



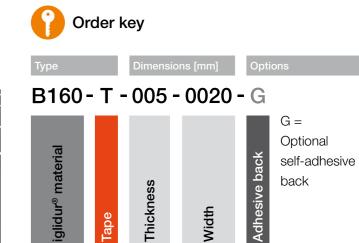


This material complies with EU directive 10/2011 and also with FDA (Food and Drug Administration) specifications for repeated contact with food.

# iglidur® tribo-tape | Product range

For use in visible areas - iglidur® B160





iglidur®

tribo-tape

Especially where the iglidur® tribo-tape is a visible part, the new black option now offers even more creative freedom. In addition the wear resistance has been improved once again compared to iglidur® A160.



tribo-tape from iglidur® B160 with adhesive back Temperature -40°C up to +90°C

Width

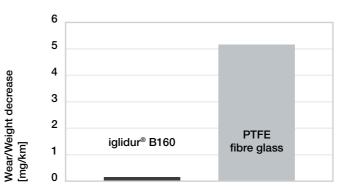
### Dimensions [mm]

Material thickness	Material thickness	Width	Part No.	Part No.
without adhesive back	with adhesive back	±1.0	without adhesive	with adhesive back
±0.1	±0.121		back	
0.5	0.71	20	B160-T-005-0020	B160-T-005-0020-G
0.5	0.71	50	B160-T-005-0050	B160-T-005-0050-G
0.5	0.71	100	B160-T-005-0100	B160-T-005-0100-G
0.5	0.71	500	B160-T-005-0500	B160-T-005-0500-G
1.0	1.21	500	B160-T-010-0500	B160-T-010-0500-G



Individual widths upon request

Continuously from 10-500mm



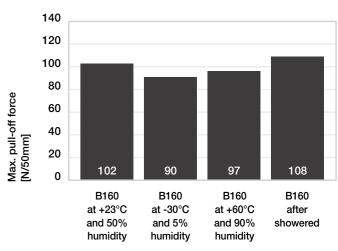
Linear wear against stainless steel pin (AISI 303) F = 10N, v = 9,600mm/min



Cutting service

Design tribo-tape flexibly

www.igus.eu/tape-cut-to-size



180° pull-off test after various exposure conditions





With its white colour and UV-stabilised additives, iglidur® W160 tribo-tape offers even more design freedom.148)



Туре		Dimens	ions [mm]	Opti	ions
W160	- T -	005	- 0020	- G	
iglidur® material	Tape	Thickness	Width	Adhesive back	G = Optional self-adhesive back

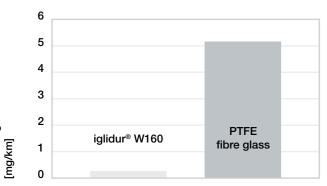
tribo-tape from iglidur® W160 with adhesive back Temperature -40°C up to +90°C

### Dimensions [mm]

Material thickness	Material thickness	Width	Part No.	Part No.
without adhesive back	with adhesive back	±1.0	without adhesive	with adhesive back
±0.1	±0.121		back	
0.5	0.71	20	W160-T-005-0020	W160-T-005-0020-G
0.5	0.71	50	W160-T-005-0050	W160-T-005-0050-G
0.5	0.71	100	W160-T-005-0100	W160-T-005-0100-G
0.5	0.71	500	W160-T-005-0500	W160-T-005-0500-G
1.0	1.21	500	W160-T-010-0500	W160-T-010-0500-G



### Individual widths upon request Continuously from 10-500mm



Linear wear against stainless steel pin (AISI 303) F = 10N, v = 9600mm/min

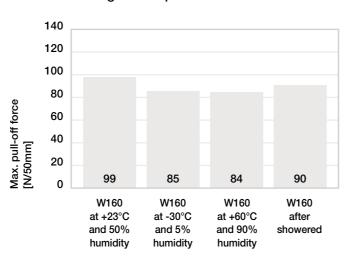
<sup>148)</sup> The original antibacterial version of the iglidur® W160 material is no longer available due to a change in the Biocides Regulation. A new antibacterial version is being developed.



### **Cutting service**

Design tribo-tape flexibly

www.igus.eu/tape-cut-to-size



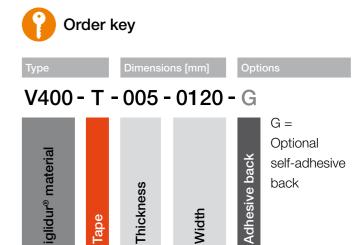
180° pull-off test after various exposure conditions

## iglidur® tribo-tape | Product range

High media resistance - iglidur® V400



iglidur® V400 tribo-tape is not only extremely wear-resistant but also extremely media and temperature-resistant. In fact, it has been proven in tests to be up to 10 times more wear-resistant than special products for machine beds.



iglidur®

tribo-tape

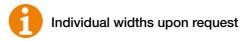


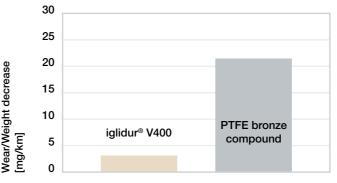
tribo-tape from iglidur® V400 with adhesive back Temperature -40°C up to +160°C

Width

### Dimensions [mm]

Material thickness	Material thickness	Width	Part No.	Part No.
without adhesive back	with adhesive back	±1.0	without adhesive	with adhesive back
±0.1	±0.121		back	
0.5	0.71	120	V400-T-005-0120	V400-T-005-0120-G





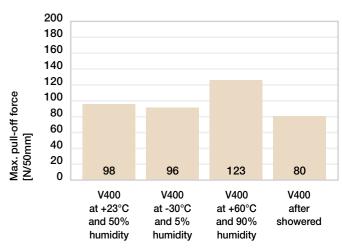
Linear wear against stainless steel pin (AISI 303) F = 35N, v = 0.5m/min



### **Cutting service**

Design tribo-tape flexibly

www.igus.eu/tape-cut-to-size



180° pull-off test after various exposure conditions

