

645

Materials chemical resistance

Materials resistance Pag 646->648	General Pag 649	PH-Range Pag 649	Rubber materials Pag 649/650	Pin materials Pag 650
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Materials for plastic chains and modular belts

POM	Low friction Acetal	Lubricated Acetal	Antistatic Acetal
	LF	MPX Pag 652	AS Pag 655
	LFA		
	LFB	MP Pag 653	
	LFD		
	LFG		
	LFN	Reinforced Acetal	
	LFW Pag 651	DKM Pag 654	

PBT	Performance Polybutylene terephthalate	Extra-Performance Polybutylene terephthalate
	MX Pag 656	PFX Pag 657

PP	Polypropylene	Reinforced Polypropylene
	PP	PPX Pag 659
	PPB	
	PPW	
	Pag 658	

PA	Polyamide composite	Polyamide composite
	MWX Pag 660	PA Pag 661

Materials for stainless steel chains



Stainless steel	
SS Pag 662	SSE Pag 663
SSM Pag 664	SSA Pag 665

Materials for sprockets



Polyamide	Reinforced Polyamide
PA Pag 666	RPA Pag 666

Material chemical resistance

Resistenza chimica dei materiali / Materials chemical resistance / Chemische Beständigkeit der Materialien

LEGEND: ● Resistant | ● Conditionally Resistant | ● Not Resistant

Material chemical resistance

Substances	PBT	POM	PP	PE	PA
at norm climate conditions DIN50014, 23°C/50% r.a.h.	Chains & Belts	Chains & Belts	Chains & Belts	Curves Chain guides Components	Sporckets Components Chains & Belts
A Acetamide 50%		●		●	●
Acetic acid, aqueous solution 10%	●	●	●	●	●
Acetic acid, aqueous solution 5%	●	●	●	●	●
Acetic acid, concentrated	●	●	●	●	●
Acetone	●	●	●	●	●
Ammonia, aqueous solution 10%	●	●	●	●	●
Anone			●	●	●
B Benzene	●	●	●	●	●
Benzine	●	●	●	●	●
Bitumen		●	●	●	●
Boric acid, aqueous solution 10%	●	●	●	●	●
Butyl acetate	●	●	●	●	●
C Calcium chloride, aqueous solution 10%	●	●	●	●	●
Carbon tetrachloride	●	●	●	●	●
Chlorbenzene	●	●	●	●	●
Chloroform	●	●	●	●	●
Citric acid, aqueous solution 10%	●	●	●	●	●
Cupric (II) sulphate, 10%		●	●	●	●
Cyclohexane	●	●	●	●	●
Cyclohexanone	●	●	●	●	●
D Diesel oil	●	●	●	●	●
Dimethyl formamide	●	●	●	●	●
Dioctyl phthalate	●	●	●	●	●
Dioxane	●	●	●	●	●
E Edible fats, edible oils	●	●	●	●	●
Ethanol 96%	●	●	●	●	●
Ethyl ether	●	●	●	●	●
Ethylacetate	●	●	●	●	●
Ethylene chloride	●	●	●	●	●
F Formaldehyde, aqueous solution 30%		●	●	●	●
Formamide	●	●		●	●
Formic acid, aqueous solution 10%	●	●	●	●	●
Freon, frigen, liquid	●		●	●	●
Fruit juices	●	●	●	●	●

Continue >>

Movex

Material chemical resistance

Resistenza chimica dei materiali / Materials chemical resistance / Chemische Beständigkeit der Materialien

LEGEND: ● Resistant | ● Conditionally Resistant | ● Not Resistant

Substances	PBT	POM	PP	PE	PA
at norm climate conditions DIN50014, 23°C/50% r.a.h.	Chains & Belts	Chains & Belts	Chains & Belts	Curves Chain guides Components	Sporckets Components Chains & Belts
Fuel oil	●	●	●	●	●
G Glycerine	●	●	●	●	●
Glycol	●	●	●	●	●
Glystantine, aqueous solution 40%	●	●	●	●	●
H Heptane, hexane	●	●	●	●	●
Hydrochloric acid, aqueous solution 2%	●	●	●	●	●
Hydrochloric acid, aqueous solution 36%	●	●	●	●	●
Hydrofluoric acid, 40%	●	●	●	●	●
Hydrogen peroxide, aqueous solution 0.5%	●	●	●	●	●
Hydrogen peroxide, aqueous solution 30%	●	●	●	●	●
Hydrogen sulphide	●	●	●	●	●
Hydrogen sulphide, aqueous solution	●	●	●	●	●
I Iodine solution, alcohol solution			●	●	●
Iso-octane			●	●	●
Isopropanol	●	●	●	●	●
L Lactic acid, aqueous solution 10%	●	●	●	●	●
Lactic acid, aqueous solution 90%		●	●	●	●
Linseed oil	●	●	●	●	●
M Methanol	●	●	●	●	●
Methyl ethyl ketone	●	●	●	●	●
Methylene chloride	●	●	●	●	●
Milk	●	●	●	●	●
N Nitric acid, aqueous solution 2%	●	●	●	●	●
Nitrobenzene	●	●	●	●	●
O Oxalic acid, aqueous solution 10%	●	●	●	●	●
Ozone	●	●		●	●
P Paraffin oil	●	●	●	●	●
Perchloroethylene	●	●	●	●	●
Petroleum	●	●	●	●	●
Phenol, aqueous solution	●	●	●	●	●
Phosphoric acid, aqueous solution 10%	●	●	●	●	●
Phosphoric acid, concentrated	●		●	●	●
Potassium dichromate, aqueous solution 10%	●	●	●	●	●
Potassium lye, aqueous solution 10%	●	●	●	●	●
Potassium lye, aqueous solution 50%	●	●	●	●	●

Continue >>

Material chemical resistance

Resistenza chimica dei materiali / Materials chemical resistance / Chemische Beständigkeit der Materialien

LEGEND: ● Resistant | ● Conditionally Resistant | ● Not Resistant

Substances	PBT	POM	PP	PE	PA
at norm climate conditions DIN50014, 23°C/50% r.a.h.	Chains & Belts	Chains & Belts	Chains & Belts	Curves Chain guides Components	Sporckets Components Chains & Belts
Potassium permanganate, aqueous solution 1%	●	●	●	●	●
Propanol	●	●	●	●	●
Pyridine		●	●	●	●
S Salicylc acid	●			●	●
Silicon oils	●	●	●	●	●
Soap solution, aqueous solution	●	●	●	●	●
Soda lye, aqueous solution 5%	●	●	●	●	●
Soda lye, aqueous solution 50%	●	●	●	●	●
Soda solution, aqueous solution 10%	●		●	●	●
Sodium bisulphite, aqueous solution 10%	●	●	●	●	●
Sodium carbonate, aqueous solution 10%	●	●	●	●	●
Sodium chloride, aqueous solution 10%	●	●	●	●	●
Sodium nitrate, aqueous solution 10%	●	●	●	●	●
Sodium thiosulphate, aqueous solution 10%	●	●	●	●	●
Styrene	●	●	●	●	●
Sulphuric acid, aqueous solution 2%	●	●	●	●	●
Sulphuric acid, concentrated 98%	●	●	●	●	●
T Tar	●	●	●		●
Tartaric acid	●	●	●	●	●
Tetrahydrofurane	●	●	●	●	●
Tetralin	●	●		●	●
Toluene	●	●	●	●	●
Transformer oil	●	●	●	●	●
Trichlorethylene	●	●	●	●	●
Triethanolamine	●	●	●	●	●
U Urea, aqueous solution	●	●	●	●	●
V Vaseline	●	●	●	●	●
W Water, cold	●	●	●	●	●
Water, warm	●	●	●	●	●
Wax, molten	●	●	●	●	●
Wine, brandy	●	●	●	●	●
X Xylene	●	●	●	●	●
Z Zinc chloride, aqueous solution 10%	●	●	●	●	●

General

LEGEND: ● Resistant | ● Conditionally Resistant | ● Not Resistant

Test condition	PBT	POM	PP	PE	PA
at norm climate conditions DIN50014, 23°C/50% r.a.h.	Chains & Belts	Chains & Belts	Chains & Belts	Curves Chain guides Components	Sprockets Components Chains & Belts
Acids, weak	●	●	●	●	●
Acids, strong	●	●	●	●	●
Alkalines, weak	●	●	●	●	●
Alkalines, strong	●	●	●	●	●
Solvents, alcohol	●	●	●	●	●
Solvents, ester	●	●	●	●	●
Solvents, ether	●	●	●	●	●
Solvents, Ketone	●	●	●	●	●
Water, cold	●	●	●	●	●
Water, hot	●	●	●	●	●

PH-Range

General pH-limits at 23°C	PBT	POM	PP	PE	PA
Lower limit	2	4	1	1	4
Upper limit	9	13	13,5	13,5	12

Rubber materials

LEGEND: ● Very good | ● Good | ● Worse

Test condition	NBR	EPDM-PP	TPR	TPE
at 23°C	GT stainless steel chains	Gripper chains	Gripper chains	GT plastic chains & belts
Mechanical resistance				
Wear resistance	●	●	●	●
Tear resistance	●	●	●	●
Chemical resistance				
Against acids	●	●	●	●
Against alkalines	●	●	●	●
Against oils	●	●	●	●
Against solvents	●	●	●	●
Application temperatures				
°C -	-30	-40	-50	-50
°C +	100	130	120	120

Rubber materials

LEGEND: ● Very good | ● Good | ● Satisfactory

Test condition	UHMWPE	BluLub	C
at 23°C	Extremely high mol. weight	UHMWPE w/built in lubrication	UHMWPE w/ceramic additives
Mechanical resistance			
Wear resistance against steel chains	●	●	●
Wear resistance against plastic chains	●	●	
Chemical resistance			
Against acids	●	●	●
Against alkalines	●	●	●
Against oils	●	●	●
Against solvents	●	●	●
Application temperatures			
°C -	-40	-40	-40
°C + (shortly)	80 (100)	50 (80)	80 (100)

Pin materials

General pH-limits at 23°C	PBT	POM	PP	PE	PA
Lower limit	2	4	1	1	4
Upper limit	9	13	13,5	13,5	12

Stainless steel	Pin	Remarks
SSM	DIN-EN 1.4057 / AISI 431	Hardened
SSE	DIN-EN 1.4057 / AISI 431	Hardened
SS	DIN-EN 1.4057 / AISI 431	
SSA	DIN-EN 1.4301 / AISI 304	

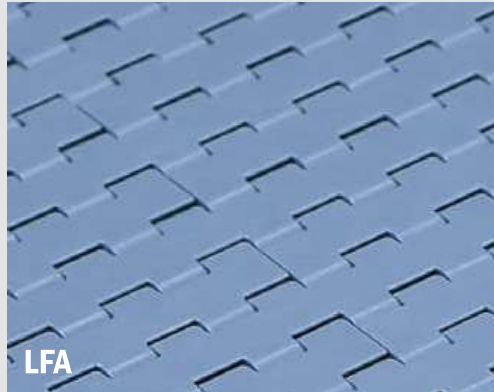
Plastic chains	Pin	Remarks
All materials	Ferritic Stainless steel (Suitable for magnetic system DIN-EN 1.4016 - AISI 430)	820, 880 TAB (also available with plastic pin POM reinforced)

Plastic belts	Pin	Remarks
LFA	PBT	White
MPX	PBT	White
DKM	PBT	White
MWX	PBT	White
MX/PFX	POM	Grey
PP	PP	Blue (500 RR: PP grey)

LF-LFA-LFB-LFD-LFG-LFN-LFW



LF



LFA

Also available:

LFB

LFD

LFG

LFN

LFW

Description

Low friction Acetal Resin.

This material can be used in all common applications.

Primary Components: POM

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Low friction acetal	POM	-40	176	149	-40	80	65	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,28	0,25	0,25	0,21	0,24	0,20
Water	n.a.	0,20	0,18	0,16	0,18	0,15
W&s & Dry lube	n.a.	0,15	0,14	0,13	0,14	0,12
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

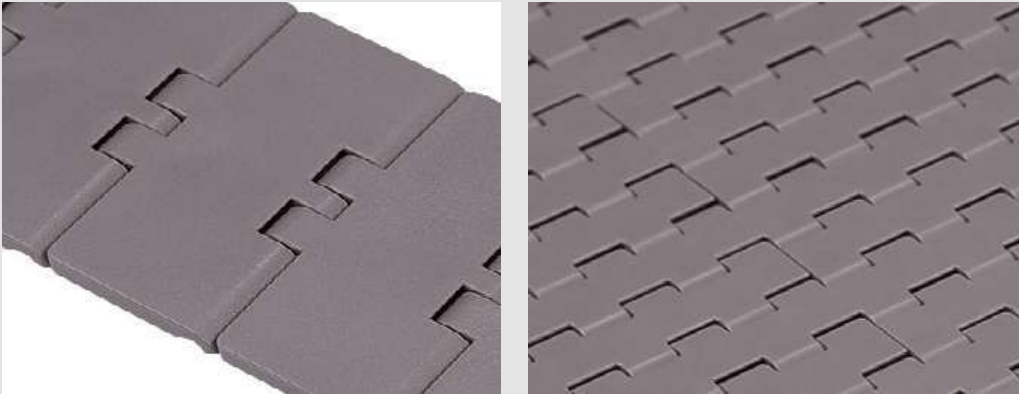
Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	BluLub®
Dry	0,24	0,20	0,18
Water	0,19	0,16	0,14
W&s & Dry lube	0,15	0,10	0,10
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

MPX



Materials

Description

High performance Material with a low coefficient of friction.

This material can increase wear life 25% over LF material.

Primary Components: POM

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Lucricated Acetal	POM	-40	176	149	-40	80	65	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,24	0,22	0,21	0,19	0,21	0,16
Water	n.a.	0,19	0,17	0,15	0,17	0,14
W&s & Dry lube	n.a.	0,15	0,14	0,13	0,13	0,12
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

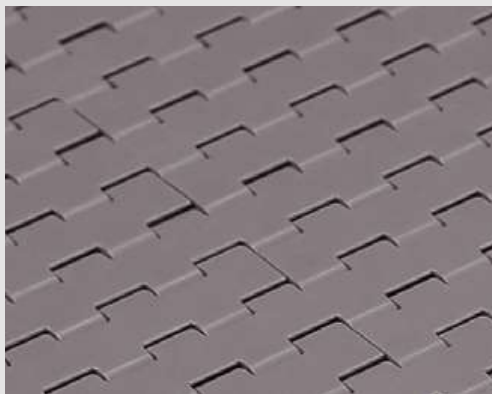
Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,23	0,19	0,17
Water	0,19	0,15	0,14
W&s & Dry lube	0,15	0,10	0,10
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

MP



Materials

Description

High performance Material with a low coefficient of friction.

This material can increase wear life 25% over LF material.

Primary Components: POM

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Lucricated Acetal	POM	-40	176	149	-40	80	65	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,24	0,22	0,21	0,19	0,21	0,16
Water	n.a.	0,19	0,17	0,15	0,17	0,14
W&s & Dry lube	n.a.	0,15	0,14	0,13	0,13	0,12
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	BluLub®
Dry	0,23	0,19	0,17
Water	0,19	0,15	0,14
W&s & Dry lube	0,15	0,10	0,10
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

DKM



Materials

Description

Aramide reinforced acetal material

It's commonly used in dry running glass handling applications.

Primary Component: POM

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Aramide reinforced acetal	POM	-40	176	149	-40	80	65	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,21	0,19	0,16	0,20	0,15	0,13
Water	n.a.	0,17	0,15	0,15	0,14	0,13
W&s & Dry lube	n.a.	0,14	0,13	0,13	0,12	0,11
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,21	0,19	0,17
Water	0,18	0,15	0,14
W&s & Dry lube	0,15	0,11	0,11
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

AS



Materials

Description**AS material**

eliminates the static accumulation that can happen during conveying products.

Primary Components: POM

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Antistatic Acetal	POM	-4	180	N.R.	-18	82	N.R.	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,35	0,28	0,29	0,25	0,27	0,24
Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
W&s & Dry lube	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Oil	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

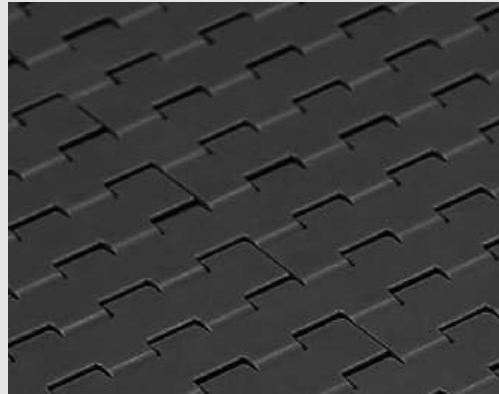
Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,27	0,22	0,20
Water	n.a.	n.a.	n.a.
W&s & Dry lube	n.a.	n.a.	n.a.
Oil	n.a.	n.a.	n.a.

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

MX



Materials

Description

Extra Performance material (PBT with additives) with a very low coefficient of friction and improved wear resistance. Recommended for high speed and dry running applications.

Primary Components: PBT

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Performance PBT	PBT	-40	248	140	-40	120	60	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,20	0,18	0,15	0,13	0,14	0,12
Water	n.a.	0,16	0,14	0,12	0,13	0,12
W&s & Dry lube	n.a.	0,13	0,12	0,10	0,11	0,10
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,20	0,16	0,13
Water	0,17	0,11	0,09
W&s & Dry lube	0,14	0,09	0,08
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

PFX



Materials

Description

Extra Performance material (PBT with additives) with a very low coefficient of friction and improved wear resistance. Recommended for high speed and dry running applications.

Primary Components: PBT

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Extra performance PBT	PBT	-40	248	140	-40	120	60	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,18	0,16	0,14	0,10	0,11	0,10
Water	n.a.	0,14	0,13	0,11	0,12	0,11
W&s & Dry lube	n.a.	0,12	0,11	0,09	0,10	0,09
Oil	n.a.	0,09	n.a.	n.a.	n.a.	n.a.

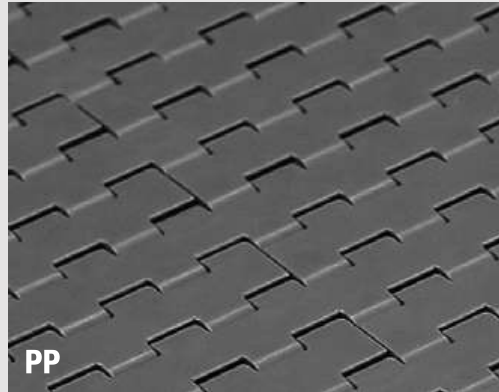
Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	BluLub®
Dry	0,18	0,16	0,12
Water	0,15	0,10	0,08
W&s & Dry lube	0,13	0,08	0,07
Oil	0,09	0,09	0,09

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

PP-PPB-PPW



Also available:

PPB

PPW

Description

Polypropylene

for better chemical resistance and higher temperatures.

Primary Component: PP

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Polypropylene	PP	40	220	220	4	104	104	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,40	0,30	0,32	0,28	0,29	0,26
Water	n.a.	0,24	0,26	0,22	0,23	0,21
W&s & Dry lube	n.a.	0,20	0,20	0,18	0,19	0,18
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

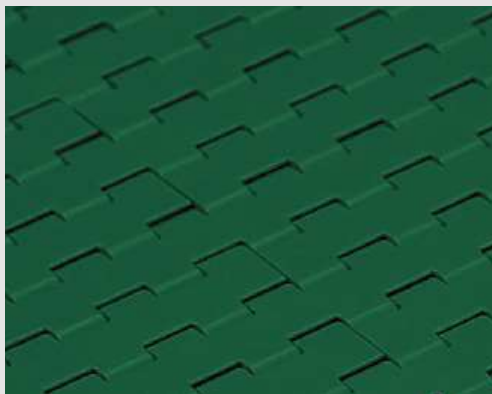
Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,29	0,24	0,21
Water	0,23	0,19	0,17
W&s & Dry lube	0,19	0,13	0,13
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

PPX



Materials

Description

Reinforced Polypropylene

for improved heat stability and chemical resistance.

Primary Component: PP

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Reinforced Polypropylene	PP	40	220	220	4	104	104	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,40	0,30	0,32	0,28	0,29	0,26
Water	n.a.	0,24	0,26	0,22	0,23	0,21
W&s & Dry lube	n.a.	0,20	0,20	0,18	0,19	0,18
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

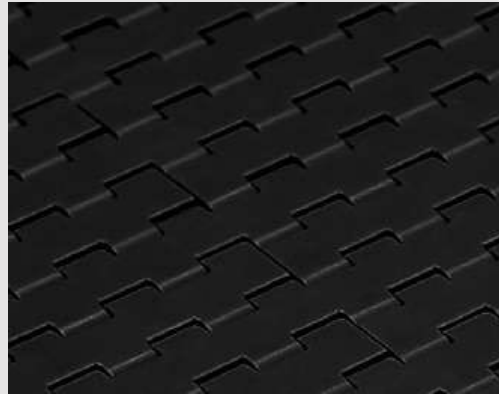
Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	BluLub®
Dry	0,29	0,24	0,21
Water	0,23	0,19	0,17
W&s & Dry lube	0,19	0,13	0,13
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

MWX



Materials

Description

MWX increases wear life

Used in applications where chain is subject to abrasives conditions such as glass sand and dirt.

Primary Component: Nylon (PA)

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Polyamid Composite	PA	-40	219	N.R.	-40	104	N.R.	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,24	0,21	0,18	0,15	0,17	0,14
Water	n.a.	0,19	0,17	0,14	0,15	0,14
W&s & Dry lube	n.a.	0,15	0,14	0,12	0,13	0,12
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

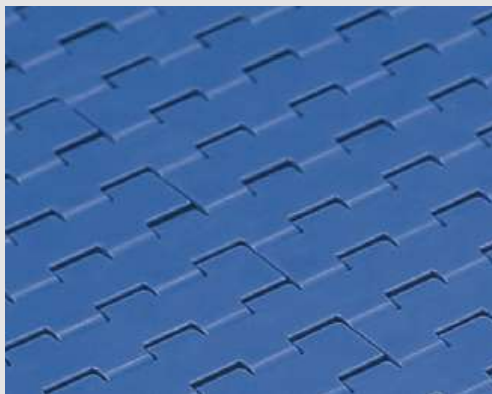
Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,24	0,19	0,15
Water	0,20	0,13	0,11
W&s & Dry lube	0,17	0,11	0,09
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

PA



Materials

Description**PA Polyamide composite**

The high crystallinity of this material gives it excellent mechanical properties such as high abrasion, high wear resistance as well as good hardness and stiffness.

Primary Components: Nylon

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Polyamid Composite	PA	-40	219	N.R.	-40	104	N.R.	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,24	0,21	0,18	0,15	0,17	0,14
Water	n.a.	0,19	0,17	0,14	0,15	0,14
W&s & Dry lube	n.a.	0,15	0,14	0,12	0,13	0,12
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	BluLub®
Dry	0,24	0,19	0,15
Water	0,20	0,13	0,11
W&s & Dry lube	0,17	0,11	0,09
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

SS

**Description**

Ferritic Stainless Steel (1.4016)
for standard applications.

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Standard Stainless Steel	1.4016	-22	750	265	-30	400	130	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,40	0,50	0,35	0,30	0,47	0,35
Water	n.a.	0,35	0,30	0,25	0,31	0,30
W&s & Dry lube	n.a.	0,20	0,15	0,15	0,21	0,15
Oil	n.a.	0,20	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	n.a.	0,35	0,32
Water	0,40	0,27	0,24
W&s & Dry lube	0,20	0,18	0,15
Oil	0,20	0,18	0,15

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

SSE

**Description**

Specially treated Ferritic Stainless Steel (1.4589)
for improved working-load and less friction.

Materials

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Special Stainless Steel	1.4589	-22	750	265	-30	400	130	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,38	0,48	0,33	0,29	0,45	0,33
Water	n.a.	0,33	0,29	0,24	0,29	0,29
W&s & Dry lube	n.a.	0,19	0,14	0,14	0,20	0,14
Oil	n.a.	0,19	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	n.a.	0,33	0,30
Water	0,38	0,26	0,23
W&s & Dry lube	0,19	0,17	0,14
Oil	0,19	0,17	0,14

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

SSM

**Description**

Specially treated Ferritic SS (1.4589)
with optimized surface finish for superior sliding properties. For High-Speed and more critical applications.

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Max Speed Stainless Steel	1.4589	-22	750	265	-30	400	130	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,34	0,43	0,30	0,26	0,40	0,30
Water	n.a.	0,30	0,26	0,21	0,26	0,26
W&s & Dry lube	n.a.	0,17	0,13	0,13	0,18	0,13
Oil	n.a.	0,17	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	n.a.	0,32	0,29
Water	0,36	0,24	0,22
W&s & Dry lube	0,18	0,16	0,14
Oil	0,18	0,16	0,14

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

SSA

**Description**

Austenitic Stainless Steel with high resistance to corrosion and acid (AISI 304)
for improved working-load and less friction.

Materials

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Austenitic Stainless Steel	AISI 304	-22	750	265	-30	400	130	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,43	0,38	0,34	0,30	0,33	0,33
Water	n.a.	0,30	0,27	0,21	0,29	0,29
W&s & Dry lube	n.a.	0,15	0,14	0,14	0,15	0,15
Oil	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,40	0,30	0,30
Water	0,35	0,22	0,22
W&s & Dry lube	0,15	0,15	0,15
Oil	0,15	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

PA



Description

PA Polyamide composite

The high crystallinity of this material gives it excellent mechanical properties such as high abrasion, high wear resistance as well as good hardness and stiffness.

Primary Component: Polyamide (PA)

Screws: Stainless steel

Nuts: Zinc plated steel

Materials

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Polyamide	PA	-40	221	N.R.	-40	105	N.R.	YES

Note: Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

Reinforced PA



Description

PA Polyamide reinforced

High quality polyamide specifically developed for injection molding, glass fiber reinforced.

Primary Component: Polyamide (PA)

Screws: Stainless steel

Nuts: Nickel plated brass

Materials

General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Polyamide Reinforced	PA	-4	248	248	-20	120	120	-

Note: Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.