

# 645

## Materials chemical resistance

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

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

<b>PBT</b>	<b>Performance Polybutylene terephthalate</b>	<b>Extra-Performance Polybutylene terephthalate</b>
	MX Pag 656	PFX Pag 657

<b>PP</b>	<b>Polypropylene</b>	<b>Reinforced Polypropylene</b>
	PP	PPX Pag 659
	PPB	
	PPW Pag 658	

<b>PA</b>	<b>Polyamide composite</b>	<b>Polyamide composite</b>
	MWX Pag 660	PA Pag 661

## Materials for stainless steel chains



<b>Stainless steel</b>	
SS Pag 662	SSE Pag 663
SSM Pag 664	SSA Pag 665

## Materials for sprockets



<b>Polyamide</b>	<b>Reinforced Polyamide</b>
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
<b>A</b>	<b>Acetamide 50%</b>		●		●	●
	Acetic acid, aqueous solution 10%	●	●	●	●	●
	Acetic acid, aqueous solution 5%	●	●	●	●	●
	Acetic acid, concentrated	●	●	●	●	●
	Acetone	●	●	●	●	●
	Ammonia, aqueous solution 10%	●	●	●	●	●
	Anone			●	●	●
<b>B</b>	<b>Benzene</b>	●	●	●	●	●
	Benzine	●	●	●	●	●
	Bitumen		●	●	●	●
	Boric acid, aqueous solution 10%	●	●	●	●	●
	Butyl acetate	●	●	●	●	●
<b>C</b>	<b>Calcium chloride, aqueous solution 10%</b>	●	●	●	●	●
	Carbon tetrachloride	●	●	●	●	●
	Chlorbenzene	●	●	●	●	●
	Chloroform	●	●	●	●	●
	Citric acid, aqueous solution 10%	●	●	●	●	●
	Cupric (II) sulphate, 10%		●	●	●	●
	Cyclohexane	●	●	●	●	●
	Cyclohexanone	●	●	●	●	●
<b>D</b>	<b>Diesel oil</b>	●	●	●	●	●
	Dimethyl formamide	●	●	●	●	●
	Diocetyl phthalate	●	●	●	●	●
	Dioxane	●	●	●	●	●
<b>E</b>	<b>Edible fats, edible oils</b>	●	●	●	●	●
	Ethanol 96%	●	●	●	●	●
	Ethyl ether	●	●	●	●	●
	Ethylacetate	●	●	●	●	●
	Ethylene chloride	●	●	●	●	●
<b>F</b>	<b>Formaldehyde, aqueous solution 30%</b>		●	●	●	●
	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	Sprockets Components Chains & Belts
Fuel oil	●	●	●	●	●
<b>G</b> Glycerine	●	●	●	●	●
Glycol	●	●	●	●	●
Glycantine, aqueous solution 40%	●	●	●	●	●
<b>H</b> 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	●	●	●	●	●
<b>I</b> Iodine solution, alcohol solution			●	●	●
Iso-octane			●	●	●
Isopropanol	●	●	●	●	●
<b>L</b> Lactic acid, aqueous solution 10%	●	●	●	●	●
Lactic acid, aqueous solution 90%		●	●	●	●
Linseed oil	●	●	●	●	●
<b>M</b> Methanol	●	●	●	●	●
Methyl ethyl ketone	●	●	●	●	●
Methylene chloride	●	●	●	●	●
Milk	●	●	●	●	●
<b>N</b> Nitric acid, aqueous solution 2%	●	●	●	●	●
Nitrobenzene	●	●	●	●	●
<b>O</b> Oxalic acid, aqueous solution 10%	●	●	●	●	●
Ozone	●	●		●	●
<b>P</b> Paraffin oil	●	●	●	●	●
Perchlorethylene	●	●	●	●	●
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		●	●	●	●
<b>S</b> Salicylic 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%	●	●	●	●	●
<b>T</b> Tar	●	●	●		●
Tartaric acid	●	●	●	●	●
Tetrahydrofurane	●	●	●	●	●
Tetralin	●	●		●	●
Toluene	●	●	●	●	●
Transformer oil	●	●	●	●	●
Trichlorethylene	●	●	●	●	●
Triethanolamine	●	●	●	●	●
<b>U</b> Urea, aqueous solution	●	●	●	●	●
<b>V</b> Vaseline	●	●	●	●	●
<b>W</b> Water, cold	●	●	●	●	●
Water, warm	●	●	●	●	●
Wax, molten	●	●	●	●	●
Wine, brandy	●	●	●	●	●
<b>X</b> Xylene	●	●	●	●	●
<b>Z</b> 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
<b>Mechanical resistance</b>				
Wear resistance	●	●	●	●
Tear resistance	●	●	●	●
<b>Chemical resistance</b>				
Against acids	●	●	●	●
Against alkalines	●	●	●	●
Against oils	●	●	●	●
Against solvents	●	●	●	●
<b>Application temperatures</b>				
°C -	-30	-40	-50	-50
°C +	100	130	120	120

## Rubber materials

LEGEND: ● Very good | ● Good | ● Satisfactory

Test condition	UHMWPE	<i>BluLub</i>	C
at 23°C	Extremely high mol. weight	UHMWPE w/built in lubrication	UHMWPE w/ceramic additives
<b>Mechanical resistance</b>			
Wear resistance against steel chains	●	●	●
Wear resistance against plastic chains	●	●	
<b>Chemical resistance</b>			
Against acids	●	●	●
Against alkalines	●	●	●
Against oils	●	●	●
Against solvents	●	●	●
<b>Application temperatures</b>			
°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	

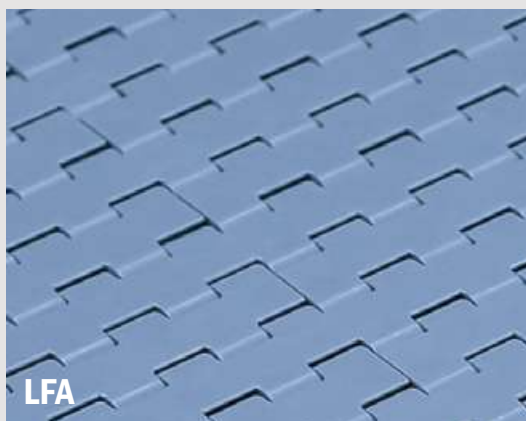
Plastic chains	Pin	Remarks
All materials	Ferritic Stainless steel (Suitable for magnetic system DIN-EN 1.4016 - AISI 430)	820, 880 TAB (also available with plastic pin POM reinforced)

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.

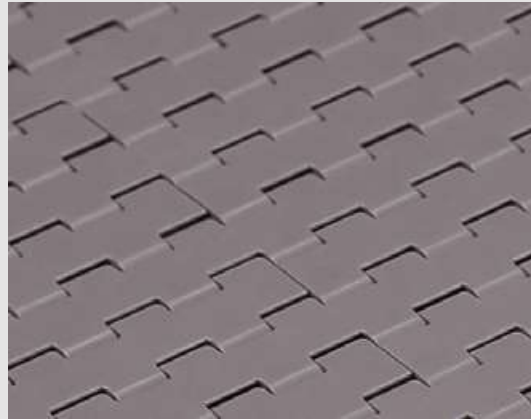
### Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
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

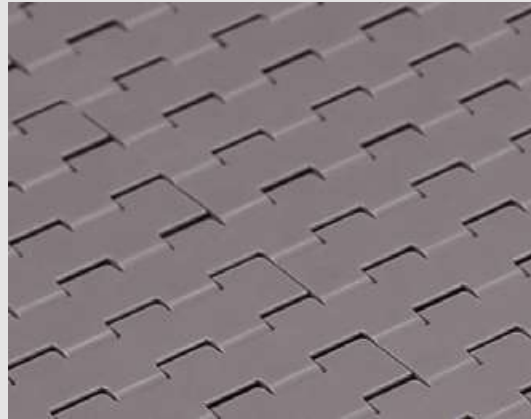
#### Note

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	<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.

## 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.

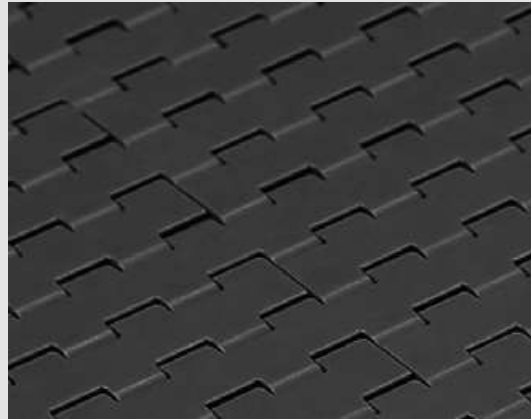
**Friction Factors Between Material and Product**

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.

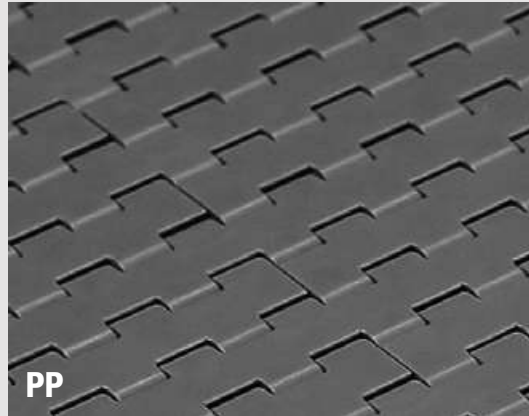
## Friction Factors Between Material and Product

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

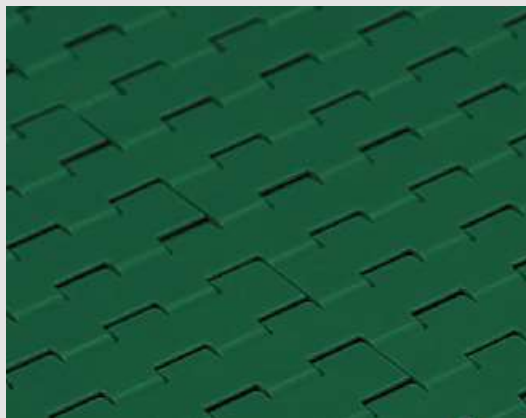
Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub</i> ®
Dry	0,29	0,24	0,21
Water	0,23	0,19	0,17
W&s & Dry lube	0,19	0,13	0,13
Oil	0,10	0,10	0,10

#### 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.

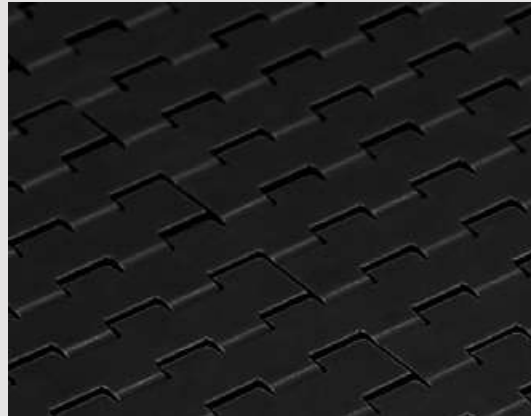
## Friction Factors Between Material and Product

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

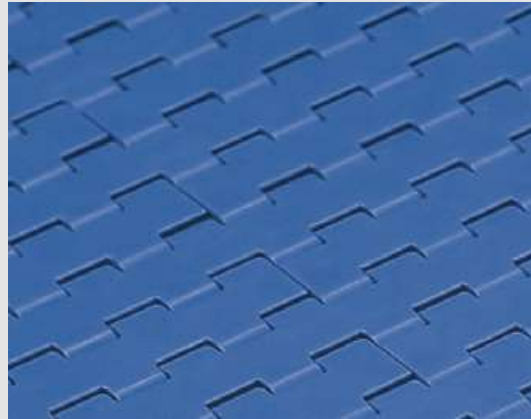
#### Note

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.

Materials

### 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.

### 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	BluLub®
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



Materials

**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



Materials

**Description**

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

**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	BluLub®
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.