GEBAU

General-purpose plastics

Catalogue 2020

High-impact polystyrene

HIPS UV	basic product
HIPS HM	improved opacity
HIPS EM	embossed
HIPS UV+	maximum UV-resistance
HIPS IMP	improved impact resistance
HIPS Mirror	laminated surface

General purpose polystyrene

GPPS UV	basic product
GPPS UV+	maximum UV-resistance
GPPS prism rhomb	prism-rhomb embossed
GPPS prism	prism embossed

Polymethyl methacrylate

PMMA	basic product
PMMA prism	prism embossed

Polypropylene round rod

Rod PP round	basic product

Polypropylene

PP	basic product made of PP block polymer
PP homo	basic product made of PP homopolymer
PP foamed	foamed

Acrylonitrile Butadiene Styrene

ABS	basic product
ABS MT	matte finish
ABS GL	glossy finish
ABS EM	embossed
ABS UV	maximum UV-resistance
ABS IMP	improved impact resistance

Polyethylene terephthalate

PET-A	basic product

Acrylonitrile Butadiene Styrene + Polymethyl methacrylate

ABS+PMMA 5%	acrylic layer thickness 5%
ABS+PMMA 10%	acrylic layer thickness 10%
ABS+PMMA % EG	high adhesion
ABS+PMMA % UV	UV-resistant
ABS+PMMA EM	embossed
ABS+PMMA IMP	improved impact resistance
ABS+PMMA HM	improved opacity

HIPS

Colour	LT	Surface	Size, mm	Thickness, mm / Sheets per pallet									
Gebau HIPS - high-impact polystyrene				1	1.5	1.8	2	3	4	5	6	8	10
White 5001		gloss/matt	2000 x 3000	150	100	+	80	50	40	30	25	+	+
			1500 x 3000	200	+	+	+	+	+	+	+	+	+
White sanitary		gloss/matt	custom made	+	+	+	+	+	+	+	+	+	+
Opal 141	36%	gloss/matt	2000 x 3000	+	100	+	80	50	40	+	+	+	+
Opal 563	33%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	25	+	+
			1500 x 3000	200	+	+	+	+	+	+	+	+	+
Yellow 145	14%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Yellow 208	10%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Orange 137	3%	gloss/matt	2000 x 3000	+	+	+	80	50	+	+	+	+	+
Red 209	2%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Red 272	2.6%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Red 723	<1%	gloss/matt	2000 x 3000	+	+	+	80	50	+	+	+	+	+
Green 182	<1%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Green 226	<1%	gloss/matt	2000 x 3000	+	+	+	80	50	+	+	+	+	+

+ Can be custom made. Check production conditions

* Other colours, thicknesses, formats, matte coating, protective film on one or both sides and corona treating are possible

* LT values are for 3mm thickness

HIPS

Colour	LT	Surface	Size, mm	Thickness, mm / Sheets per pallet									
				1	1.5	1.8	2	3	4	5	6	8	10
Gebau HIPS - high-impact polystyrene													
Green 275	<1%	gloss/matt	2000 x 3000	+	+	+	+	+	+	+	+	+	+
Light Blue 245	<1%	gloss/matt	2000 x 3000	+	+	+	80	50	+	+	+	+	+
Light Blue 300	<1%	gloss/matt	2000 x 3000	+	+	+	80	50	+	+	+	+	+
Blue 228	<1%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Blue 306	0%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Grey 535	<1%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
Metallic grey 520	0%	gloss/matt	2000 x 3000	+	+	+	80	50	40	+	+	+	+
			1500 x 3000	100	+	+	+	+	+	+	+	+	+
Brown 218	0%	gloss/matt	2000 x 3000	+	+	+	80	50	+	+	+	+	+
Brown 469	0%	gloss/matt	2000 x 3000	+	+	+	80	50	+	+	+	+	+
Black 640	0%	gloss/matt	2000 x 3000	150	100	90	80	50	40	30	25	+	+
			1500 x 3000	200	+	+	+	+	+	+	+	+	+

+ Can be custom made. Check production conditions

* Other colours, thicknesses, formats, matte coating, protective film on one or both sides and corona treating are possible

* LT values are for 3mm thickness

Modifications as per your requirement:

EM	embossed
UV	UV-modified
HM	improved opacity
Mir	laminated
IMP	high impact resistance

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HIPS

Colour	Basis	Size, mm	Thickness, mm / Sheets per pallet								
Gebau HIPS Mirror - laminated			0.7	1	1.5	2	4	5	6	8	10
Mirrored Silver	Black	2000 x 1000		100	+	100					
Mirrored Silver	White	2000 x 1000		+	+	+					
Mirrored Gold	Black	2000 x 1000		100	+	100					
Mirrored Gold	White	2000 x 1000		+	+	+					

+ Can be custom made. Check production conditions

GPPS

Colour	LT	Surface	Size, mm	Thickness, mm / Sheets per pallet							
Gebau GPPS - general purpose polystyrene				**1.5**	**2**	**3**	**4**	**5**	**6**	**8**	**10**
Transparent	90%	gloss	2000 x 3000		80	50	40	30	25	20	15
Opal 701	68%	68% LT, all thicknesses	1800 x 1200	+	+						
			2000 x 3000	+	+						
Gebau GPPS - embossed				**1.9**	**2.8**	**4**	**5**	**6**	**8**	**10**	
Transparent		Prism	1800 x 1200	+	+	+	+	+	+	+	
			2000 x 3000	+	+	+	+	+	+	+	
		Prism rhomb	1800 x 1200	+	+	+	+	+	+	+	
			2000 x 3000	+	+	+	+	+	+	+	

+ Can be custom made. Check production conditions

* Other colours, thicknesses, formats, protective film on one or both sides and corona treating are possible

* LT values are for 3mm thickness

All standard GPPS sheets are UV stabilized but for indoor use only

* UV + - higher UV-resistance modification is possible

ABS+PMMA

Colour	Surface	Size, mm	Thickness, mm / Sheets per pallet							
Gebau ABS+PMMA 5%			**1**	**1.5**	**2**	**3**	**4**	**5**	**6**	**8**
White	gloss	custom made	+	+	+	+	+	+	+	+
Any Colour	gloss	custom made	+	+	+	+	+	+	+	+
Gebau ABS+PMMA 10%			**1**	**1.5**	**2**	**3**	**4**	**5**	**6**	**8**
Transparent	gloss	custom made	+	+	+	+	+	+	+	+
Any Colour	gloss	custom made	+	+	+	+	+	+	+	+

+ Can be custom made. Check production conditions

* Other colours, thicknesses, formats, protective film on one or both sides and corona treating are possible and corona treating are possible

Modifications as per your requirement:

%	another layer thickness
EG	higher adhesion
UV	UV-modified
EM	embossed
IMP	high impact resistance
HM	high coverage

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ABS

Colour	Surface	Size, mm	Thickness, mm / Sheets per pallet							
Gebau ABS - Acrylonitrile Butadiene Styrene			**1**	**1.5**	**2**	**3**	**4**	**5**	**6**	**8**
Any Colour	smooth	2000 x 3000	+	+	+	+	+	+	+	+
		1000 x 3000	+	+	+	+	+	+	+	+
	EM	1000 x 3000	+	+	+	+	+	+	+	+
Black 640	EM	1000 x 3000	+	+	150	100	75	+	+	+
Grey 130	EM	1000 x 3000	+	+	150	100	75	+	+	+
Grey 535	EM	1000 x 3000	+	+	150	100	75	+	+	+
Gebau ABS matt - matte surface			**1**	**1.5**	**2**	**3**	**4**	**5**	**6**	**8**
Any Colour	matt	2000 x 3000	+	+	+	+	+	+	+	+
		1000 x 3000	+	+	+	+	+	+	+	+
Gebau ABS gloss - glossy surface			**1**	**1.5**	**2**	**3**	**4**	**5**	**6**	**8**
Any Colour	gloss	2000 x 3000	+	+	+	+	+	+	+	+
		1000 x 3000	+	+	+	+	+	+	+	+

\+ Can be custom made. Check production conditions
* Other colours, thicknesses, formats, protective film on one or both sides and corona treating are possible and corona treating are possible

Modifications as per your requirement:

UV	UV-modified
EM	embossed
IMP	high impact resistance

PMMA

Colour	LT	Surface	Size, mm	Thickness, mm / Sheets per pallet											
Gebau PMMA - extrusion acrylic				2	2.5	2.8	3	4	5	6	8	10	12	15	20
Transparent	92%	gloss	2000 x 3000	+	+	+	+	+	+	+	+	+			
		prism	1790 x 1200			+	+								
		prism rhomb	1790 x 1200	+	+	+	+								

+ Can be custom made. Check production conditions
* Other colours, thicknesses, formats, matte coatings, protective film on one or both sides and corona treating are possible and corona treating are possible
* LT values are for 3mm thickness

PP

Colour	Surface	Size, mm	Thickness, mm / Sheets per pallet								
Gebau PP - Polypropylene block polymer extrusion			3	4	5	6	8	10	12	15	20
Natural	smooth	2000 x 1000	+	+	+	+	+	+	+	+	+
		3000 x 1500	+	+	+	+	+	+	+	+	+
		4000 x 2000	+	+	+	+	+	+	+	+	+
Grey 7032	smooth	2000 x 1000	+	+	+	+	+	+	+	+	+
		3000 x 1500	+	+	+	+	+	+	+	+	+
		4000 x 2000	+	+	+	+	+	+	+	+	+
Green 6005	smooth	2000 x 1000	+	+	+	+	+	+	+	+	+
		3000 x 1500	+	+	+	+	+	+	+	+	+
		2000 x 1500	+	+	+	+	+	+	+	+	+

+ Can be custom made. Check production conditions
* Other colours, thicknesses and formats are possible

Modifications as per your requirement:

UV	UV-resistant

PP homo

Colour	Surface	Size, mm	Thickness, mm / Sheets per pallet								
Gebau PP – polypropylene homopolymer extrusion			**3**	**4**	**5**	**6**	**8**	**10**	**12**	**15**	**20**
Natural	smooth	2000 x 1000	+	+	+	+	+	+	+	+	+
		3000 x 1500	+	+	+	+	+	+	+	+	+
		4000 x 2000	+	+	+	+	+	+	+	+	+
Any Colour	smooth	2000 x 1000	+	+	+	+	+	+	+	+	+
		3000 x 1500	+	+	+	+	+	+	+	+	+
		4000 x 2000	+	+	+	+	+	+	+	+	+

* Can be custom made. Check production conditions
* Other colours, thicknesses and formats are possible

Modifications as per your requirement:

UV	UV-resistant

PP

Colour	Surface	Size, mm	Thickness, mm / Sheets per pallet				
Gebau PP foamed – foamed polypropylene block polymer			8	10	12	15	20
Natural	smooth	2000 x 1000	+	+	+	+	+
Green 6005	smooth	3000 x 1500	+	+	+	+	+
		4000 x 2000	+	+	+	+	+
Any Colour	smooth	2000 x 1000	+	+	+	+	+
		3000 x 1500	+	+	+	+	+
		2000 x 1500	+	+	+	+	+

+ Can be custom made. Check production conditions

* Other colours, thicknesses, formats are possible

* Sheets with protective film are possible

Modifications as per your requirement:

UV	UV-resistant

PET-A

Colour	Property	Size, mm	Thickness, mm / Sheets per pallet										
Gebau PET-A - Polyethylene terephthalate			0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.5	2	3
Transparent	gloss	2050 x 1250	250	+	500	+	300	+	+	200	150	100	+
		3050 x 2050								120	+	50	40

\+ Can be custom made. Check production conditions
* Other thicknesses and formats are possible
* Sheets with protective film are possible

Modifications as per your requirement:

UV	UV-resistant

Rod PP round

Colour	Property	Winding	Weight, kg	
Gebau Rod PP round			**Hank – 5 kg**	**Coil – 7 kg**
Natural	Round	Hank, Coil	+	+
Grey 7032			+	+
Green 6005			+	+
Light Blue 541			+	+
Any Colour			+	+

+ Can be custom made. Check production conditions
* Other colours, thicknesses and footage are possible

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Materials' physical properties

Property	Method	Unit	HIPS matt/matt	HIPS gloss/matt	GPPS	ABS	ABS/PMMA 5%	10%	PET-A	PP	PP foam.	PMMA
GENERAL												
density	ISO 1183	g/cm^3	1.05	1.05	1.05	1.06	1.065*	1.070*	1.33	0.92	0.7	1.19
OPTIC												
light transmission	ASTM D-1003	%	-	-	90	-	-	-	90	-	-	92
MECHANIC												
flexural modulus	ISO 178	MPa	-	-	-	2100	2200	2300	-	-		-
bending strength	ISO 178	MPa	-	-	103	-	-	-	-	-		-
tensile modulus	ISO 527	MPa	1550	1650	3300	2150	2250	2350	2450	1200	950	3200
breaking strength	ISO 527	MPa	22	24	55	43	44	45	60	24	16	76
elongation at break	ISO 527	%	50	15	3	50	5	5	>100	>100	50	5.5
IMPACT STRENGTH												
Charpy notched	ISO 179	kJ/m2	15	15	3	18	18	18	-	40	-	-
Charpy without notch	ISO 179	kJ/m2	ND	-	<25	-	-	-	ND	ND	ND	<25
THERMAL												
Vicat softening temperature VST/B/50	ISO 306	°C	87	92	101	102	103	103	75	-	-	103
deflection temperature during heating (A 1.8 MPa)	ISO 75	°C	-	-	86	101	-	-	69	-	-	95
flammability (d = 1.6 mm)	UL 94	class	HB	HB	HB	HB	HB	HB	-	-	-	HB
ELECTRIC												
the dielectric constant (100 Hz)	IEC 60250		2.5	2.5	2.5	-	-	-	-			-
volume resistivity	IEC 60093	Ohm*m	> 1*10^{16}	> 1*10^{16}	> 1*10^{16}	-	-	-	-	≥ 1*10^{13}		-
surface resistivity	IEC 60093	Ohm	> 1*10^{13}	-	> 1*10^{14}	-	-	-	-	-		-

ND = Non-destructive

* ABS/PMMA SW 5% and 10% have density of 1.1 g/cm$_3$

The values given here are for reference only. Actual values may change during production and depend on requirements and recipes agreed with the client.

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