

Composite sheets for electroinsulation, mechanical or thermoinsulation applications



Pos.	Material	Reinforcement	DIN-Norm	EN-Norm	US-Norm			Selected typical values		
								ARCO Standard	DIN 7735	EN 60893 /IEC 893
Hardened paper sheets										
1	Hp 2061	Paper	HP 2061	PFCP 201	X, XP	120°C	Brown	Comparative tracking index Breakdown voltage 1 min Water absorption	IEC 60112 IEC60243-1 ISO 62	CTI 100 10 / 10 kV/1mm 550 mg
2	Hp 2061.5	Paper	Hp 2061.5	PFCP 202	XX	120°C	Brown	Breakdown voltage 1 min	IEC 60243-1	13/13 kV/1mm
3	Umacart - MKHP	Paper + melamine layer	as HP 2061 Electrical properties - better than HP 2061	EN 438-1		120°C	Grey	Comparative tracking index Breakdown voltage 1 min Water absorption	IEC 60112 IEC60243-1 ISO 62	15/15 kV/1mm < 80mg/1mm
Cotton phenolic sheets										
4	Hgw 2082	Cotton fabric	Hgw 2082	PFCC 201	C	120°C	Brown	Breakdown voltage parallel/perpendicular	IEC 60243-1	1/1 kV
5	Hgw 2082.5	Cotton fabric	Hgw 2082.5	PFCC 202	CE	120°C	Brown	Breakdown voltage parallel/perpendicular	IEC 60243-1	20/5,1 kV
Laminated compressed wood										
6	Lignostone L II/2 E3	Beech wood	KP20222			105°C	Brown	Density	DIN 53479	0,95g/cm3
7	Lignostone M II/2E3	Beech wood	KP20224			100°C	Brown	Density	DIN 53479	1,25 g/cm3
8	Lignostone H II/2E3	Beech wood	KP20228			80°C	Brown	Density	DIN 53479	>1,35g/cm3
9	Lignostone H II/2/30	Vacuum-impregnated beech wood	KP 20227			-	Brown	Good mechanical strenght Compressive strenght Density	DIN 53454 DIN 53479	160/250 N/mm ² >1,35g/cm3
Glass fabric / Epoxy sheets										
10	AR- Hgw. 2372	Glass fabric	Hgw 2372	EPGC 201	G10	130°C	Light grey-green			
11	AR - Hgw 2372.1	Glass fabric	Hgw 2372.1	EPGC 202	FR4	130°C	Light grey-green	Flammability	UL 94	V0
12	AR - Hgw 2372.4	Glass fabric	Hgw 2372.4	EPGC 203	G11	155°C	Green			
13	AR - Hgw 2372.4 / class H	Glass fabric	(> Hgw 2372.4)	EPGC 308	(> G11)	180° C	Brown	Compressive strenght	ISO 604	620MPa
14	AJ - Hgw 2372.4 / class H	Glass fabric	(> Hgw 2372.4)	EPGC 308	(> G11)	180° C	Green	Compressive strenght/ typical product - slot wedges	ISO 604	350Mpa
15	as AR - Hgw 2372.4/type 200°C	Glass fabric		as EPGC 308	(> G11)	200° C	Brown-orange	Dielectric strenght perpendicular/ in oil 90°C	IEC 60243-1	16 kV/mm
16	EPGC 204	Glass fabric	Hgw 2372.2	EPGC 204	FR-5	155° C	Brown/red (only for big project)	Flexural strength (perpendicular)	ISO 178	550MPa
								Comparative trackin index	IEC 60112	CTI 180
								Flexural strength (perpendicular)	ISO 178	540N/mm2
								Flammability	UL94	V0
Glass roving / Epoxy sheets										
17	EPC 205	Glass roving	Hgw 2370.4	EPGC 205	G - 11	180°C	Natural	Flammability	IEC 60707	FV0/3mm
Glass Mat / Epoxy sheets										
18	EPM 203	Glass mat	Hgw 2372.4	EPGM 203	G - 11	180°C	Yellow	Compressive strenght, good temper. resistance, electric strenght Standard EN 45545-2	ISO 604	450MPa

Glass mat / Polyester sheets										
19	UPM 203 / UPM 70S, UPM 71S/	Glass mat	HM 2471	UPGM 203	GPO - 3	155°C	White/red	Comparative tracking index Flammability	IEC 60112 IEC 60707	CTI 600 FV0>3 mm
20	UPM S1	Glass mat	HM 2472	-	-	155°C	Beige	Compressive strength perpendicular to laminations	ISO 604	400MPa
								Comparative tracking index	IEC 60112	CTI 600
21	UPM S2 / UPM 204R	Glass mat/fabric	HM 2472	UPGM 205		155°C	White	Compressive strenght Comparative tracking index Flammability	ISO 604 IEC 60112 IEC 60707	480MPa CTI 600 FV0>5 mm
Glass fabric / Silicone sheets										
22	Hgw 2572	Glass fabric	Hgw 2572	SI GC 202	G 7	180°C	White	Comparative tracking index Flammability	IEC 60112 UL 94	CTI 450 VO
Sheets for thermoinsulation and for special application										
23	ARMATHERM HT LC Glastherm	Glass mat				200°C	Beige	Modul of elasticity Compressive strength (perpendicular) Thermal conductivity	ISO 178 ISO 604	10000N/mm2 125 N/mm2 0,18W/m.K
24	ARMATHERM 200 HT Glastherm	Glass mat				200°C	Green	Compressive strength (perpendicular) Thermal conductivity	ISO 178 ISO 604	330MPa 0,27W/m.K
25	ARMATHERM 250 HT Glastherm	Glass mat				250°C	Light green	Compressive strength perpendic. 23°C	ISO 604	600MPa
								Compressive strength perpendic. 200°C	ISO 604	450MPa
								Thermal conductivity		0,23 W/m.K
26	ARMACEM 506	special cement reinforced with inorganic fibres				500°C/short- term 750°C	Gray	Compres.strength perpendic. to laminations	ISO 604	120 N/mm2
								Electric strenght	IEC 243	2,4kV/1mm
27	ARMACEM 600	Calcium/silicate				500°C/short- term 700°C	Gray	Tracking resistance compressive strength thermal conductivity	IEC 112 ISO 604 DIN 52612	CTI 500 75 N/mm2 .0,649W/m.K
28	Sindanyo L 23	Special cement and addmixtures reinforced with unclassified fibres				230°C/short- term 250°C	Gray	Compressive strength Thermal conductivity	ISO 604 DIN 52612	85N/mm2 0,5W/m.K
29	Sindanyo L 26					230°C, short- term 250°C	Gray	Low water consumption		1%
30	Sindanyo H 91					max 700°C	Gray	Good thermal resistance		
31	Arclex M	glass bonded mica				500°C	Gray	Electric strength/90°C		40kV/mm
Mica / Silicone resin										
32	ARMICANIT M	Muscovite Mica/ Silicone resin				500°C/short- term 700°C	Gray	Flammability	UL94	Class V0
33	ARMICANIT P	Phlogopite Mica/ silicone resin				700°C/short- term 1000°C	Brown	Flammability	UL94	Class V0
Thermoplastic Materials										
34	Plexiglas	PMMA / acrylopolymer				max 70°C	Transparent	Mechanical applications		
35	Makrolon / Lexan	Polycarbonat				max. 120°C	Transparent	Flammability cold formable	DIN 4102	Stufe B2
36	POLYAMIDE PA6,PA6 G	Polyamide				100°C	White	Flammability	UL 94	HB
Other Materials optional			Datasheets optional				Datasheets on request			

The data mentioned in this brochure are average values. We cannot accept any responsibility for their accuracy.

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