

DOSIMETRIC CHART

DOSIMETRIC PROPERTIES OF ORFIT INDUSTRIES' PRODUCTS

Product reference or material	Product description	Type of material	Measured value				
			Density g/cm ³	Absorption Factor (AF %)			mm H ₂ O (0,1mm)
				Co-60 (0,2%)	6MV (0,15%)	10MV (0,15%)	
Thermoplastic material							
Orfit Classic 2 maxi	flat pre-cut or sheet	Low temperature thermoplastic	1,13		0,30%	0,10%	1,7
Efficast 1,6 micro	flat pre-cut or sheet	Low temperature thermoplastic	1,13		0,50%	0,20%	1,7
Efficast 2 maxi	flat pre-cut or sheet	Low temperature thermoplastic	1,13		0,40%	0,10%	1,7
Efficast 2 micro	flat pre-cut or sheet	Low temperature thermoplastic	1,13		0,40%	0,20%	2,2
Efficast 3,2 maxi	flat pre-cut or sheet	Low temperature thermoplastic	1,13		0,90%	0,10%	2,9
Classic Hardware							
35700N	Fixation plate with 6 head supports	PMMA	1,1		2.3%, clamp 10.1%	1.5%, clamp 7.4%	NR (= not relevant)
35740N	Set of 6 head supports in PE	PE foam	0,03		0.1% per cm foam	0.05% per cm foam	0.24 per cm
High Precision Hardware							
35751N	Standard HP base plate in HPL	High pressure laminate (HPL)	1,4	0,918	4,90%	4%	17,1
32100	HP base plate in CFL reinforced	Partly HPL, partly CFL ⁽²⁾	-		0,5% / 4,9%	0,6% / 4,1%	2,2 / 17
32110	HP base plate in CFL - IMRT	Carbon fibre laminate (CFL)	-	-	0,50%	0,50%	2,1
35754/6N	HP secondary base plate in HPL	HPL	1,4	0,918	4,90%	4%	17,1
32140	HP secondary base plate in CFL - IMRT	CFL (2)	-		0,5% / 4,9%	0,6% / 4,1%	2,2 / 17
32130	HP base plate small in CFL - IMRT	CFL	-		0,50%	0,50%	2
32150	HP long base plate in CFL - IMRT	CFL	-		0,50%	0,50%	2,1
35701N	Shoulder support in HPL	HPL	1,4	0,918	4,90%	4%	17,1
35741N	Standard table fix in HPL, containing art. 35746	HPL	1,4		NR	NR	NR
35703	LD block 20 mm in CFL	CFL	-		0,60%	0,60%	3
35704	LD wedge 9° angle in CFL	CFL	-		0,50%	0,60%	2,6
35758	3D head support in PU - model A	Poyurethane (PU) ^{(1) (2)}	-	-	3,6% - 5,9%	2,8% - 4,5%	10,4 - 16,4
35713	3D head support in PU - model B	PU ^{(1) (2)}	-		3,6% - 5,9%	2,8% - 4,5%	10,4 - 16,4
35714	3D head support in PU - model C	Rigid polyethylene (PE) ⁽²⁾	-		3,6% - 5,9%	2,8% - 4,5%	10,4 - 16,4
35754/1	HP block 20 mm in rigid PE	Rigid PE ⁽²⁾	0,95	-	6%	4,70%	NR
35754/2	HP block 40 mm in rigid PE	Rigid PE	0,95	-	11,90%	9,50%	NR
35754/3	HP wedge 9° angle in rigid PE	Rigid PE ⁽²⁾	0,95	-	4%-8,5%	3,1%-6,8%	NR
35754/4	HP wedge 18° angle in rigid PE	PE foam ⁽²⁾	0,95	-	7,4%-16,9%	6,8%-13,6%	NR
35755	LD head support in PE foam with lateral support	PE foam ⁽²⁾	0,03	-	0,3%-0,7%	0,4%-0,6%	0,6 - 2,2
35765	LD head support in PE foam without lateral support	PE foam ⁽²⁾	0,03		0,6%-0,3%	0,4%-0,1%	0,7-2,3
35756	Additional plate in acrylic for personalized head support	Acrylic (PMMA)	1,1		3.3%, cap 5.6%	2.0%, cap 3.7%	NR
35751N/2	Fixation block 76 mm - 2 holes	Polyacetal (POM)	1,42		NR	NR	NR
35737	Blue or Green cap 5 mm thick	EVA 5 mm	0,14-0,16		0,50%	0,30%	1,3
35705	Blue or Green cap 8 mm thick	EVA 8 mm	0,14-0,16		0,50%	0,40%	1,8
Pelvicast Hardware							
35781-N1	Pelvicast base plate in HPL		1,4	0,911	5,20%	4,30%	NR
35781-S1	Pelvicast base plate in HPL - narrow version		1,4	0,911	5,10%	3,40%	NR
35781-N1/2	Standard central insert in HPL		1,4	-	2,30%	2%	9,9
35782	LD central insert in CFL		-	-	0,6% (edge 2,7%)	0,5% (edge 2,3%)	2,0 (edge 6,3)
35783	Pubic block		1,1		NR	NR	NR

(1) This product consists of an open cell foam core and a closed cell foam skin. Therefore, a uniform density cannot be measured

(2) The difference in value indicates the difference in thickness in areas of the product

Absorption SETUP: Elekta SL-15 (Linac 4), ionisation chamber NE2505/3 in standard Solid Water phantom (depth 5 cm), electrometer Nuclear Enterprises NE2620, FS 10x10cm, GH 0?, CH 90?, SSD 95 cm, 200 ME per registration.

Buildup SETUP: Elekta SL-15 (Linac 4), ionisation chamber Markus #3036 with ring in 30x30cm PMMA sheet phantom, 4 cm PMMA backscatter, Elektrometer Nuclear Enterprises NE2620, FS 10x10cm, GH 0?, SDD 100cm, 200 ME per registration. All testing with 10 MV,