ZENTEC™ Thermoplastics

CIVCO RT Technical Data Sheet

ZENTEC Thermoplastics have an established reputation of being highly conforming masks. These thermoplastics are available in a variety of thicknesses and are compatible with Type-S™ or Uni-frame® Patient Positioning Systems. For a full list of available thermoplastic part numbers, please visit www.civcort.com.

Type-S™ IMRT Reinforced™

Product Configuration

Type-S IMRT Style 18

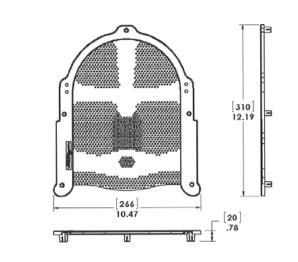
Head Only 310 L x 266 W x 20 H (mm)

MTAPUID1824VT

2.4 mm thickness 0.45 lbs (0.20 kg)

MTAPUID1832VT

3.2 mm thickness 0.55 lbs (0.25 kg)

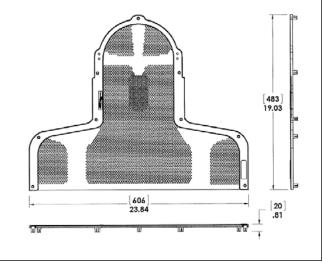


Type-S IMRT Style 27 Head Neck Shoulders 483 L x 606 W x 20 H (mm)

MTAPSID2724VT 2.4 mm thickness

1.1 lbs (0.50 kg) MTAPSID2732VT

3.2 mm thickness 1.4 lbs (0.63 kg)







Uni-frame® IMRT Reinforced™

Product Configuration

Uni-frame IMRT Style 18 **Uni-frame IMRT Style 18** Head Only, Wide 275 L x 254 W (mm) Head Only 279 L x 254 W (mm) MTAPUI1824VT MTAPUIW1824VT 2.4 mm thickness 2.4 mm thickness 0.55 lbs (0.25 kg) 0.5 lbs (0.23 kg) MTAPUIW1832VT 2.4 mm thickness 0.52 lbs (0.24 kg) 11.0 [275] 10.8 [2.4] 10.0



Technical Details

				I.		
	2.4 IMRT Reinforced			3.2 IMRT Reinforced		
Primary Materials	Polycaprolactone, White Polycarbonate, Black Delrin					
Activation temperature (water bath)	75° C / 165° F			75° C / 165° F		
Activation time (water bath)	2-3 min (Head-only) 2-3 min (H, N & S)			2–3 min (Head-only) 2–3 min (H, N & S)		
Attenuation (Unstretched Mask)**	6MV: 18MV:	0.81% 0.78% 0.21% 0.09%	(Perf region) (Solid region) (Perf region) (Solid region)	6MV: 18MV:	1.03% 1.09% 0.30% 0.21%	(Perf region) (Solid region) (Perf region) (Solid region)
Thickness	2.4 mm (.094")			3.2 mm (.125")		
Perforation (surface)	Varies (IMRT Pattern)			Varies (IMRT Pattern)		
Density	1.145 g/cm ³			1.145 g/cm ³		
Surface feeling	Smooth			Smooth		
Color	Lavender			Lavender		
Odor	None			None		
Biocompatible	Yes			Yes		
Transparent when activated	No			No		
Molding time (maximum)*a	1 min 30 sec			2 min		
Hardening time*b	4 min 30 sec			4 min		
Time to completion (minimum)*	6 min			6 min		



Product Details			
Indications for use	Head & Neck Immobilization		
Contraindications	None		
MR Safe	Yes		
Integration	Connects to Universal Couchtop™ and Baseplates with Type-S™ or visit www.civcort.com for Uni-frame® options		
FDA Clearance	Yes		
CE Marked (EU DOC)	Yes		
Other Country Registrations	Available upon request		
Country of Manufacture	USA		
Packaging Details			
Unit Pack	1 Piece		
Units / Box	5 Pieces		
Shelf Life	Not Applicable		
Warranty	See CIVCO RT website for Product Warranty Statement		
Sterilization	Non-Sterile		

Test Procedures used to Acquire Data

Definitions*

- a. **Molding Time** the time frame available from when the mask is removed from the waterbath to the time that the mask can no longer be molded or formed.
- b. **Hardening Time** the time between the molding and completion time where the mask should be cooling and hardening on its own without being manipulated or molded.
- c. **Time to Completion** the total time from when the mask is taken out of the waterbath to when the mask can be removed from the patient.

Attenuation Test Conditions**

- a. 100 cm SAD
- b. 10 x 10 cm Field Size
- c. 6 MV Dmax = 1.5 cm
 - 18 MV Dmax = 3.0 cm

