

ZENTEC™ Thermoplastics

CIVCO 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.

Product Configuration

Type-S IMRT Style 18

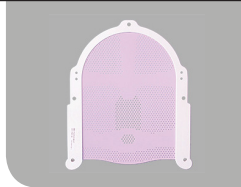
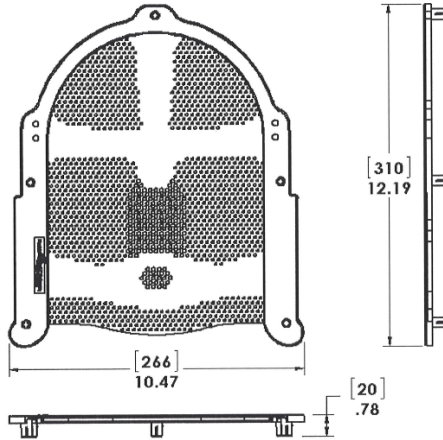
Head Only
310 L x x 266 W x 20 H (mm)

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

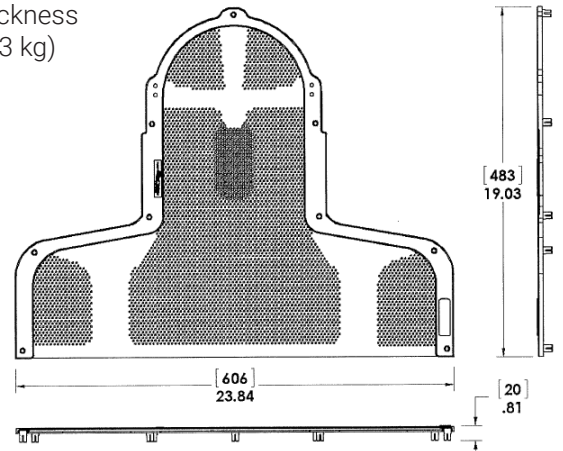
Head Neck Shoulders
483 L x x 606 W x 20 H (mm)

MTAPSID2724VT

2.4 mm thickness
1.1 lbs (0.50 kg)

MTAPSID2732VT

3.2 mm thickness
1.4 lbs (0.63 kg)



Technical Details

	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: 0.81% (Perf region) 0.78% (Solid region) 18MV: 0.21% (Perf region) 0.09% (Solid region)	6MV: 1.03% (Perf region) 1.09% (Solid region) 18MV: 0.30% (Perf region) 0.21% (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)*^c	6 min	6 min

Product Details

Indications for use	Head & Neck Immobilization
Contraindications	None
MRI Compatible	MR Safe
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 CIVCORT 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 $D_{max} = 1.5$ cm
18 MV $D_{max} = 3.0$ cm