

# Uremono™ Dental Foil

## Technical Data Sheet

### I. Application, Storage and Shelf Life

- (i) Application: It is for making orthodontic appliances, orthodontic retainers, oral protectors and jaw pads, etc.
- (ii) Storage: The packaged dental film is stored indoors with a dry, well ventilated, and free of corrosive gases.
- (iii) Shelf life: 5 years.

### II. Product Performance

Performances		Test Method	Target Range	Typical Value <sup>(1)</sup>
<b>Physical Properties</b>				
Appearance		YY/T 1819-2022	Smooth surface, free of visible impurities, stains, cracks, crevices, bubbles, sharp edges, burrs, pores, scratches and other defects.	
Odor		YY/T 1819-2022	No irritating odor	
Size Control		YY/T 1819-2022	T <sup>(2)</sup> ±0.05mm R/L <sup>(2)</sup> ±1mm	Pass
Abrasion Resistance		GB/T 5478-2008	Product does not get worn out	Pass
<b>Mechanical Properties</b>				
Tensile Properties	Tensile Modulus	YY/T 1819-2022	700~3000MPa	965.8MPa
	Yield Stress	YY/T 1819-2022	≥25MPa	40.1MPa
	Yield Strain	YY/T 1819-2022	≥4%	7.1%
Stress Relaxation		YY/T 1819-2022	≤75%	25.1%
Tear Strength (Angle)		YY/T 1819-2022	≥100KN/m	180.6KN/m
<b>Thermal Properties</b>				
Vicat Softening Temperature		GB/T 1633-2000 (A.120)	> 100°C	107.2°C
Thermostability		GB/T33047.1-2016	ΔW <sup>(2)</sup> ≤1%	0.31%
<b>Chemical Properties</b>				
pH Value		GB/T 14233.1-2022 (5.4.1)	ΔPH <sup>(2)</sup> ≤1.5	0.09
Heavy Metal Content (Lead)		GB/T 14233.1-2022 (5.6.1)	≤1.0 ug/ml	<1.0 ug/ml
Residue		GB/T 14233.1-2022	≤2mg	1.0mg

Note: (1). Typical Values, not to be construed as specifications. Users should confirm by their own tests.

(2). T is the thickness, R is the diameter, L is the length of the edge. W is the mass, ΔW is the change in mass. ΔPH is the difference between the PH value of the test solution and the blank solution.

**III. Product Type/Specs and Packaging**

Serial Number	Product Type	Specs	Thicknesses (mm)	Sizes	Packaging
1	Uremono 661	040120	0.40	∅120	20pcs/pack 5 packs/box
2		040125	0.40	∅125	
3		050120	0.50	∅120	
4		050125	0.50	∅125	
5		063120	0.63	∅120	
6		063125	0.63	∅125	
7		075120	0.75	∅120	
8		075125	0.75	∅125	
9		080120	0.80	∅120	
10		080125	0.80	∅125	
11		100120	1.00	∅120	
12		100125	1.00	∅125	
13	Uremono 662	040125	0.40	125mm×125mm	
14		050125	0.50	125mm×125mm	
15		063125	0.63	125mm×125mm	
16		075125	0.75	125mm×125mm	
17		080125	0.80	125mm×125mm	
18		100125	1.00	125mm×125mm	

**IV. Application Instructions and Process Guidance**

- (i) Remove dental film and seal the remaining sheet immediately (use within 30 minutes to avoid moisture).
- (ii) Fix the dental film on the film forming machine.
- (iii) Heating dental film over the softening temperature, heated to 175 °C ~ 195 °C in negative pressure forming machine and 220 °C with 20-30s for positive pressure forming machine.
- (iv) Clap the film onto the model, e.g. 3D printed with air pressure or negative vacuum pressure.
- (v) Cooling: 30-60s to harden the film on the model.
- (vi) Cut the aligner from the model.