





# The first NMPA (National Medical Products Administration, formerly CFDA) certified medical—class resin film in China.

According to the application needs of clear aligners and the biomechanical needs of orthodontic treatment, through rigorous selection of raw materials, creative adjustment of the proportion of components and optimization of processing technics, we successfully developed the IPN (Interpenetrating Polymer Network) film, whose hardness/softness is adaptive to various cases.



### IPN Film Properties



(数据来源: 备注)

Model	Click – T1	
Material	TPU	
Specifications	Thickness (mm)	Diameter (mm)
	0.8±0.05	120±2;
	1.0±0.1	125±2
Color	Colorless and transparent	

Hardness (Shore D)	≥70
Tear Strength (N/mm)	220
Tensile Modulus of Elasticity (MPA)	700–3000
Elongation at Break (%)	≥50
Yield Stress (MPa)	≥25
Tensile Strain at Yield (%)	≥4
Vicat Softening Temperature (°C)	≥80 (Tolerance ±10%)

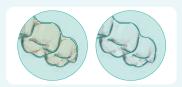
## IPN Film's Advantages

(Compared to majority of the films used by other clear aligner manufacturers)



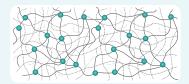
### Lighter and Thinner

While achieving the required correction force, the aligner is also more invisible and its joint adaptability is better as well. After forming, the thinnest part of aligner could be as thin as 0.3mm.



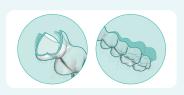
#### Better Stain Resistance

In complex oral environment, It is much less possible for aligners to get stained.



#### Stronger Tear Resistance

After forming, it is much more difficult for aligners to tear.



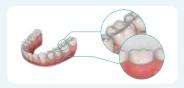
#### **Higher Resilience**

IPN film can match the appropriate rigidity and flexibility for tooth movement, and apply force precisely, so as to reduce the problems of fracture or failure caused by repeated taking-off & inserting and complex dental arch malocclusion.



#### More Durable and Stable

The stress relaxation curve shows that IPN film has more durable and stable force release performance than other films.



#### **Better Fitting**

The unique surface adaptability and good thermoplasticity significantly improve the cavity covering performance, which is better for force expression.

### Application

Orthodontic Clear Aligner

Attachment Template

Retainer



