Orfit® Ease 3.2mm (1/8”)

Thickness	mm (inches)	3.2 (1/8”)	3.2 (1/8”)
Perforation	% (type)	0 (non perfo)	1.0 (macro)
Thermoforming conditions			
Optimum activation temperature (in water bath)	°C (°F)	65 (149)	65 (149)
Activation time (in water bath)	minutes	3 - 4	3 - 4
Transparent when activated		no	no
Working time	minutes	2 - 2 ½	2 - 2 ½
Hardening time	minutes	6 - 6 ½	6 - 6 ½
Time to completion	minutes	21 - 22	21 - 22
Resistance to stretch		high	high
Drape		high	high
Memory (after 200 % elongation)		moderate	moderate
Maximum elongation when activated	%	550	550
Memory (after maximum elongation)		moderate	moderate
Sticks to itself when activated and wet		no	no
Sticks to itself when activated, after drying		reliable under high stress	reliable under high stress
Adhesion (velcro strip) using heat gun		no	no
Mechanical properties at 21°C			
Flexural modulus	MPa	800	780
Elastic modulus	MPa	560	470
Tensile strength	MPa	13.5	11.5
Strain at break	%	20	6.0
General properties			
Density	g cm^{-3}	1.24	1.24
Hardness (shore D)		61	61
Surface feeling		smooth	smooth
Color		white / grey	white / grey
Odor		none	none
Fatigue	cycles	11500	11000
Biocompatible		yes	yes

Information

The hardening time indicates the time period during which the material remains flexible, but no longer mouldable.

The time to completion indicates the length of time until the splint is finished and can be worn by the patient.

The memory indicates the ability of the material to regain its original shape after reheating.

The flexural modulus indicates the resistance of the material to a force causing it to bend.

The elastic modulus defines the ratio of the applied tensile stress to the change in shape of the material.

The tensile strength is the pulling force required to break the material.

The strain at break is the length increase of the material when stretched until failure.

The hardness indicates the resistance of the material to compression.

Fatigue indicates the number of stress cycles the material sustains before failure.

The biocompatibility is studied according the guidelines of the International Organization for Standardization 10993 – Biological Evaluation of Medical Devices:

- Primary skin irritation study.
- Delayed dermal contact sensitization study.
- Cytotoxicity study.

Note

Although the information in this publication is believed to be accurate and reliable, the data shown are for guidance only. Orfit Industries gives no guarantees about the results and assumes no liability in connection with them. The properties reported here are intended primarily to facilitate comparison among Orfit products. Standard testing methods often allow alternative measuring methods. Therefore, data from other sheet manufacturers may not be directly comparable. For additional information, please contact Orfit Industries.

Listed with

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