orfit The personal fit

TECHNICAL DATA SHEET

ORFICAST® THERMOPLASTIC TAPE +/- 1.8 mm (1/14")

Thickness	mm (inches)	+/- 1.8 (1/14)
Perforation	% (type)	0 (non perfo)

Thermoforming conditions

Optimum activation temperature (in water bath)	°C (°F)	65 (149)
Activation time (in water bath)	minutes	1 - 2
Transparent when activated		no
Working time	minutes	1 - 1 ½
Hardening time	minutes	3 – 3 ½
Time to completion	minutes	13 - 14
Resistance to stretch		moderate
Drape		high
Memory (after 200 % elongation)		low to moderate
Maximum elongation when activated	%	n.a.
Memory (after maximum elongation)		full
Sticks to itself when activated and wet		reliable under high stress
Sticks to itself when activated, after drying		reliable under high stress
Adhesion (velcro strip) using heat gun		yes

Mechanical properties at 21°C

Flexural modulus	MPa	90
Elastic modulus	MPa	n.a.
Tensile strength	MPa	n.a.
Strain at break	%	n.a.

General properties

Density*	g/m	varia*
Hardness (shore D)		n.a.
Surface feeling		smooth / textured
Color		soft blue / black
Odor		none
Fatigue	cycles	n.a.
Biocompatible		yes

*Density (g/m) is width dependent :

- 3 cm 18 – 20 g/m
- 6 cm 36 – 40 g/m

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 orthosis 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 minimum number of stress cycles the material sustains when bending over 90 degrees without 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:

Belgium T +32 (0)3 326 20 26
America T 516-935-8500

Ref.: 80018 – ORFICAST.docx
VERSION 3

LAST UPDATE: 04/04/2017

orfit The personal fit

TECHNICAL DATA SHEET

ORFICAST® MORE +/- 3.0 mm (1/8")

Thickness	mm (inches)	+/- 3.0 (1/8)
Perforation	% (type)	0 (non perfo)

Thermoforming conditions

Optimum activation temperature (in water bath)	°C (°F)	65 (149)
Activation time (in water bath)	minutes	2 - 3
Transparent when activated		no
Working time	minutes	1 ½ - 2
Hardening time	minutes	4 - 5
Time to completion	minutes	15 - 16
Resistance to stretch		moderate
Drape		high
Memory (after 200 % elongation)		low to moderate
Maximum elongation when activated	%	n.a.
Memory (after maximum elongation)		full
Sticks to itself when activated and wet		reliable under high stress
Sticks to itself when activated, after drying		reliable under high stress
Adhesion (velcro strip) using heat gun		yes

Mechanical properties at 21°C

Flexural modulus	MPa	90
Elastic modulus	MPa	n.a.
Tensile strength	MPa	n.a.
Strain at break	%	n.a.

General properties

Density*	g/m	varia*
Hardness (shore D)		n.a.
Surface feeling		smooth / textured
Color		soft blue / black
Odor		none
Fatigue	cycles	n.a.
Biocompatible		yes

*Density (g/m) is width dependent :

- 6 cm 80 – 100 g/m
- 12 cm 160 – 200 g/m
- 15 cm 200 – 250 g/m
- 30 cm 400 – 500 g/m

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 orthosis 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.

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

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- Delayed dermal contact sensitization study.
- Cytotoxicity study.

Note:

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Ref.: 80017 – ORFICAST MORE.docx
VERSION 4

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