

# ORFILIGHT® BLACK NS

# ORFILIGHT® ATOMIC BLUE NS

## A. GENERAL PRODUCT INFORMATION

ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS are low temperature thermoplastic sheet materials with an extra low weight. They are used for the fabrication of orthoses, for external immobilisation devices and rehabilitation aids.

ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS are applied directly to the patient after activation.

! **ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS are not suitable for internal use. They may not be used on open wounds or in the mouth.**

## B. PRODUCT RANGE

ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS are available in sheets of different thicknesses and types of perforation and ORFILIGHT BLACK NS is also available in pre-cuts.

Sheets:

Art. no.	Colour	Thickness in mm	Size in mm	Perforation type
8332Z.2/L/NS	Black	1.6	450 x 600	micro perforated
8338Z.2/L/NS		2.5		micro perforated
8334Z.1/L/NS		3.2		non-perforated
8334Z.4/L/NS		3.2		mini perforated
8332MB.2/L/NS	Atomic Blue	1.6	450 x 600	micro perforated
8338MB.2/L/NS		2.5		micro perforated
8334MB.1/L/NS		3.2		non-perforated
8334MB.4/L/NS		3.2		mini perforated

Pre-cuts:

Art. no.	Colour	Description	Size	Material
35810Z/L/NS	Black	Gauntlet thumb post orthosis	S	1.6 mm micro perforated
35811Z/L/NS			M	
35812Z/L/NS			L	
35814Z/L/NS	Black	Wrist + thumb orthosis	S	2.5 mm micro perforated
35815Z/L/NS			M	
35816Z/L/NS			L	

## C. PRECAUTIONS BEFORE USE

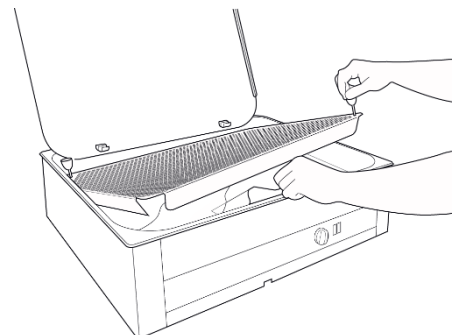
! **Make sure that the temperature of the activated material will not burn the patient.**

## D. ACTIVATION TECHNIQUE

- ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS are activated by heating at a temperature of 65°C (149°F). Possible activation sources are: Suspan water bath, heat gun or heating plate. The activation time depends on the heat source and varies from 30 seconds to 3 minutes. (e.g. at 65° C, 1.6 mm : 30 sec., 2.5 mm : 2 min., 3.2 mm : 3 min.)
- When using a Suspan water bath, it is recommended to soften the water by adding a teaspoon of liquid soap. ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS can be towelled. Accidental bonding can be undone by continuous gentle traction.
- Since ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS float, they must be kept under water by placing them under the Suspan grill, or the net that is supplied with the Suspan (see picture).
- ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS are coated with a non-sticky film. However, ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS have a gentle controlled stickiness. This controlled stickiness will help you moulding an orthosis as a third hand.  
When using a heating plate, the hot surface must be covered with a Teflon film.

! **Watch out, ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS scald at 150°C (300°F).**

- ! **Beware: Temperatures of 65°C (149°F) or more can be reached in the patient's daily life. Think of a closed car in the summer, the surface of a hot radiator, a sauna or the proximity of an open fireplace.**
- High temperatures up to a maximum of 120°C (248°F) do not damage ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS, but are not user-friendly. Even higher activation temperatures are allowed on the condition that the activation time is reduced accordingly. Wear gloves and do not apply ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS directly to the patient's skin at these high activation temperatures.
- ! **Never use an open flame to activate ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS.**



## E. WORKING PROPERTIES

### Cutting

1. Draw the orthotic pattern on the ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS sheet by means of a marker.
2. With thick sheets cut the pattern roughly with a suitable pair of scissors or use a cutter. When using a cutter, carve a straight line and break the sheet in two.

**! Be careful when using a cutter; always keep the assisting hand away from the cutting line.**

3. To cut the precise orthosis contour in thick sheets with a pair of scissors, heat ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS until it is formable but not yet stretchable.

### Applying

1. Activate the ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS pattern until it is completely soft. The activation time depends on the material thickness: 1.6 mm = 1 min. / 2.5 mm = 2 min. / 3.2 mm = 3 min.

Take the pattern out of the water and allow the surfaces to cool or dry on a towel for a few seconds.

2. Several application techniques are possible:

- Gravity technique: the material forms itself under gravity.
- Closed technique: form the material around the limb and stick the edges together.
- Bandaging technique: secure the orthosis by means of a Latex bandage.

Use the benefit of stretch and elastic properties of ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS to a maximum.

3. In case of accidental bonding, the 2 parts that are stuck can be taken apart when completely reactivated. Permanent adhesion of fixation straps and orthotic accessories is possible by dry heating the surface and by attaching under high pressure.

**! In order to secure a self-adhesive bond, it is paramount that both ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS surfaces are BRIEFLY DRY heated at high temperature (max. 250°C – 482°F).**

4. Do not remove the orthosis from the patient before ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS is sufficiently hardened. Excessive material should be trimmed before complete hardening. To do so, use a suitable pair of scissors. The cooling time can be shortened by means of cold air, a cold bandage or a cold spray.

## F. FINISHING

Trimming edges whilst the material is still relatively soft results in sealed edges. It is also possible to grind and polish the edges by using a coated abrasive wheel at low speed.

## G. MAINTENANCE AND WASTE MANAGEMENT

Orthoses made of ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS should be cleaned daily. Use lukewarm water and liquid soap or biological detergent, and rinse well.

**! Never use solvents. Avoid acid detergents.**

Sterilisation of ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS orthoses in an autoclave is impossible. Sterilisation by means of gas treatment is possible.

Disinfection is possible with alcohol, quaternary ammonium or a solution of commercial disinfecting soaps (HAC<sup>®</sup>, Sterilium<sup>®</sup>, etc.).

After use, an ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS orthosis can be disposed of with normal household waste without harming the environment.

## H. ADVICE FOR THE PATIENT

**! Give the patient sufficient information about the exact use and possible constraints of the orthosis.**

## I. STORAGE

- ORFILIGHT BLACK NS / ORFILIGHT ATOMIC BLUE NS should be stored in its original packaging.
- Storage must be in a dark, cool, dry place at a temperature of min. 10°C (50°F) and max. 30°C (86°F).
- Once removed from the packaging, leftover materials must be put back in the original packaging to avoid biodegradation.

Low temperature thermoplastics can only be kept for a limited period of time and must be protected as much as possible from light, heat and humidity. The material ages in direct relation to storage conditions. When too old, materials become brittle and too soft when activated.

## J. GENERAL SAFETY ADVICE

**! \* ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS are not suitable for internal use. They may not be used on open wounds or in the mouth.**

**! \* Never use an open flame to activate ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS.**

**! \* To make orthoses and rehabilitation aids, ORFILIGHT BLACK NS and ORFILIGHT ATOMIC BLUE NS may only be used by qualified health professionals.**

## K. ADDITIONAL INFORMATION

For additional information such as distributor contact information, product brochures, Safety Data Sheets and regulatory information, please visit our website [www.orfit.com](http://www.orfit.com).

### Note:

The instructions were written in accordance with the European Directive 93/42/EEC for Medical Devices. It is prohibited to make alterations to this text without prior approval from Orfit Industries. ORFILIGHT<sup>®</sup> is a registered trademark of ORFIT INDUSTRIES N.V.



**ORFIT INDUSTRIES**  
Vosveld 9A | B-2110 Wijnegem | Belgium  
T (+32) (0)3 326 20 26  
[welcome@orfit.com](mailto:welcome@orfit.com)

[www.orfit.com](http://www.orfit.com)



Ref. No. 31984  
VERSION 5  
LAST UPDATE: 16/02/2018  
REVISION DATE: 16/02/2020