

ORFILIGHT® NS

ORFILIGHT® BLACK NS

ORFILIGHT® ATOMIC BLUE NS

A. GENERAL PRODUCT INFORMATION

ORFILIGHT NS products 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 NS products are applied directly to the patient after activation.

! ORFILIGHT NS products are not suitable for internal use. They may not be used on open wounds or in the mouth.

B. PRODUCT RANGE

ORFILIGHT NS is available in sheets of different colours, thicknesses and types of perforation as well as in pre-cuts.

Sheets:

Art. no.	Colour	Thickness in mm	Size in mm	Perforation type
8332.2/L 8338.2/L 8334.1/L 8334.4/L	Natural	1.6 2.5 3.2 3.2	450 x 600	micro perforated micro perforated non perforated mini perforated
8332Z.2/L/NS 8338Z.2/L/NS 8334Z.1/L/NS 8334Z.4/L/NS	Black	1.6 2.5 3.2 3.2	450 x 600	micro perforated micro perforated non-perforated mini perforated
8332MB.2/L/NS 8338MB.2/L/NS 8334MB.1/L/NS 8334MB.4/L/NS	Atomic Blue	1.6 2.5 3.2 3.2	450 x 600	micro perforated micro perforated non-perforated mini perforated

Pre-cuts:

Art. no.	Colour	Description	Size	Thickness and perforation
35810/L 35811/L 35812/L	Natural	Gauntlet thumb post orthosis	S M L	1.6 mm micro perforated
35820/L 35821/L 35822/L	Natural	Dorsal wrist cock-up orthosis	S M L	3.2 mm non-perforated
35810Z/L/NS 35811Z/L/NS 35812Z/L/NS	Black	Gauntlet thumb post orthosis	S M L	1.6 mm micro perforated
35814Z/L/NS 35815Z/L/NS 35816Z/L/NS	Black	Wrist + thumb orthosis	S M L	2.5 mm micro perforated

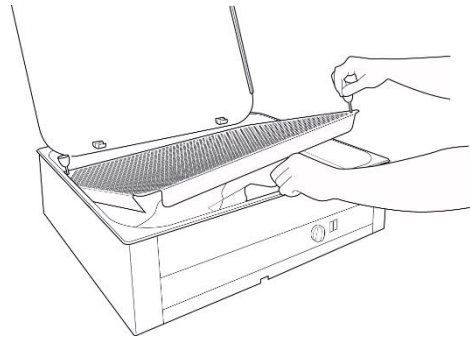
C. PRECAUTIONS BEFORE USE

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

D. ACTIVATION TECHNIQUE

1. ORFILIGHT NS products 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. the activation time in a water bath at 65°C (149°F) is 3 minutes).

2. ORFILIGHT NS products can be dried briefly on a towel. Accidental bonding can be undone by continuous gentle traction.
3. Since ORFILIGHT NS products 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). They can also be flipped with a spatula to activate both sides of the material.
4. ORFILIGHT NS products are coated with a non-sticky film. However, ORFILIGHT NS products have a gentle controlled stickiness. This controlled stickiness helps to keep the material in place during molding. When using a heating plate, the hot surface must be covered with a Teflon film.
5. **! Watch out, ORFILIGHT NS products scald at 150°C (300°F). They then become yellowish and tear easily.**
6. **! 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.**
7. **! Never use an open flame to activate ORFILIGHT NS products.**



E. WORKING PROPERTIES

Cutting

1. Draw the orthotic pattern on the ORFILIGHT NS product 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.
3. **! 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, briefly heat ORFILIGHT NS until it is softened, but not yet stretchable.

Applying

1. Activate the ORFILIGHT NS product pattern until it is completely soft. The activation time in a water bath at 65°C (149°F) is 3 minutes. 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 NS products to a maximum.
3. In case of accidental bonding, the two 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.
4. **! In order to secure a self-adhesive bond, it is paramount that both ORFILIGHT NS product surfaces are BRIEFLY DRY heated at high temperature (max. 250°C – 482°F).**
4. Do not remove the orthosis from the patient before ORFILIGHT NS is sufficiently hardened. Excessive material should be trimmed before complete hardening. To do so, dip briefly back into the hot water and 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 NS should be cleaned daily. Use lukewarm water, biological detergent or toothpaste, and rinse well.

! Never use solvents. Avoid acid detergents.

Sterilisation of ORFILIGHT 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°, Sterilium°, etc.).

After use, an ORFILIGHT 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 NS products should be stored in their 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 NS products 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 NS products.**
- ! * **To make orthoses and rehabilitation aids, ORFILIGHT NS products 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.