

OrthoEpoxy GreenLine. Sustainable epoxy resin.

The epoxy resin *OrthoEpoxy GreenLine* sets the next milestone for a new generation of materials that combine sustainability, occupational safety & health and functionality. *OrthoEpoxy GreenLine* is the first sustainable material that consists of at least 50% renewable raw materials. It eliminates possible health hazards posed by bisphenols during processing in the orthopaedic workshop as well as for prosthesis and orthosis wearers (bisphenol A is a substance of concern).

OrthoEpoxy GreenLine is used for the fabrication of lightweight, thin-walled yet stable laminates in prosthetics and orthotics.

Thanks to excellent impregnation and bonding to the reinforcement fibres, it offers a very high level of component quality like prepreg technology. The setting time of the lamination resin can be controlled via the temperature, and the component can be individually coloured with the Ottobock pigment pastes.



OrthoEpoxy resin
GreenLine

OrthoEpoxy hard-
ener GreenLine

Article number	617HG5=1	617HG5=5
Article name	OrthoEpoxy resin GreenLine	
Net contents	1 kg	5 kg
	100 resin : 40 hardener : pigment paste max. 3	
Article number	617PG5=0.4	617PG5=1
Article name	OrthoEpoxy hardener GreenLine	
Net contents	0.4 kg	1 kg
Article number	633T25=0.5	
Article name	Parting agent for OrthoEpoxy GreenLine	
Net contents	500 ml	

OrthoEpoxy GreenLine. 617HG5

Benefits at a glance

- Bisphenol-free epoxy resin:
 - Non-carcinogenic
 - Non-mutagenic
 - Not harmful to reproduction
 - Non-endocrine-damaging
- Made of at least 50% renewable raw materials
- Improved occupational health and safety
- For lightweight, thin-walled, yet sturdy laminates
- Transparent, epoxy-based resin
- Impregnation especially of carbon fibres such as the proven 617H5 Orthopox
- Good bonding to the reinforcement fibres
- Can be coloured with Ottobock pigment pastes

Practical recommendations

- Optional: Use parting agent to reduce adhesion of the PVA film to the cured laminate
- Processing time at room temperature approx. 30 minutes
- Start of gelation after approx. 45 minutes
- Partial curing after 12 hours
- Remove PVA film (outer film) prior to tempering to reduce sticking to the laminate
- Tempering in heating cabinet for 1 hour at 100 °C / 212 °F and for permanent skin contact 10 hours at 100 °C / 212 °F

Instructions for use

- Full curing of the lamination resin after 12 hours and subsequent tempering
- Lamination resin is not suitable for the fabrication of waterproof devices

Please see the 646T727=DE_INT *OrthoEpoxy GreenLine* technical information for further details on processing.

Reinforcement fibres for 617HG5

OrthoEpoxy GreenLine:

Orthopox woven carbon fibre

- No fraying of the fibres
- No double-sided adhesive tape required
- Higher mass per unit area: 245 g/m² (more compact for draping)

Article number	616G12=H5.1	616G12=H5.5
Length	1.00 m	5.00 m
Width	1.20 m	1.20 m

Orthopox woven flex

- Design of flexible contact surfaces (e.g. flaps, straps, support surfaces)
- Protects against breakage
- Suitable for post-processing (e.g. cutting, sanding)

Article number	616G181=H5.2
Length	2.00 m
Width	1.25 m

More information is available at: www.pem.ottobock.com



For further information on the safety instructions, please see the corresponding Ottobock safety data sheet.