

BÜFA® -Resin VEU 1978 HLU

Prod. No. 700-1978

VU laminating resin for mould construction

Technical Data Sheet

Product description

BÜFA® -Resin VEU 1978 HLU is a thixotropic, highly reactive laminating resin with medium viscosity that is particularly distinguished by outstanding resistance properties. BÜFA® -Resin VEU 1978 HLU is not pre-accelerated and is based exclusively on an unsaturated vinyl ester resin, type epoxy-bisphenol A-urethane, dissolved in styrene.

Applications

BÜFA® -Resin VEU 1978 HLU is used for the production of GRP moulds that are subjected to very high mechanical and particularly thermal loads. In combination with BÜFA® -VE Tooling Gelcoat, this laminating resin forms a tooling system which, when worked properly, meets the highest requirements as far as surface quality and chemical, mechanical and thermal resistance are concerned.

Specifications / technical data

Property	Test method	Value	Unit
Density at 20 °C	DIN 53 217/2	Approx. 1,1	g/ml
Viscosity at 20 °C Brookfield RV/DV-II Spl 3 rpm 20	ISO 2555	1000 – 2000	mPas
Styrene content		40 – 43	%
Flash point	DIN 53 213	+ 32	°C

Curing

Reactivity:

BÜFA method in accordance with DIN 16 945 6.2.2.1

(100 g resin + 0.5 g 742-0070 BÜFA® -Accelerator Complex 0070 + 2 ml Butanox M-50)

20 - 30 °C	27 - 37 min
20 °C - Tmax	40 - 52 min
Tmax	170 - 200 °C

Gel time at 20 °C in a 100 g cup

with 0.5 g 742-0070 and 2 ml Butanox M-50: 27 - 37 min

Attention!

The information given above refers exclusively to the use of the catalyst named and the quantity specified. The use of different products or differing quantities may yield different results.

Properties of the cured base resin

Property*	Test method	Value
Tensile strength	ISO 527-2	90 MPa
Tensile E-modulus	ISO 527-2	3,500 MPa
Elongation at break	ISO 527-2	3 - 4 %
Flexural strength	DIN 53 452	140 MPa
Flexural E-modulus	DIN 53 457	3,700 MPa
Heat distortion temperature (HDT)	ISO 75-A	145 °C

* measured in a standard laboratory atmosphere on cast test specimens made of pure resin that were conditioned for 1 hour at +150 °C.

Directions for use

Thermal after-treatment is absolutely necessary to achieve optimal mould properties. If possible, we recommend conditioning the mould (on the master model) for 8 hours at + 80 °C. When used in high temperature areas, the conditioning temperature should be as close as possible to the temperature to which the mould will be subjected later. To avoid warping and premature de-moulding, only 2 layers of glass fibre mat at the most should be laminated in one working operation. Intermediate curing should then follow, best overnight.

Storage/Handling

This product must be stored cool in closed containers, protected from sunlight. Shelf-life is at least 3 months in unopened, original containers stored up to a temperature of 20 °C. Gel and curing times may change with increasing duration of storage.

Former product name 791-7003 OLDOPAL VU Tooling Resin X

Note: The Information given above is based on our current state of knowledge and experience. In view of the many factors that may influence working conditions and the application of our products, the user is not relieved from carrying out his own tests and experiments. No legally binding warranty of certain properties or suitability for a particular purpose can be derived from this information. It is the responsibility of the receiver or user of our products to observe proprietary rights as well as existing laws and regulations. The latest version of the corresponding EU Safety Data Sheet must also be observed.

Rev. dated: 13.08.2013, Version 5