



HIGH GLOSS SURFACE

Gelcoats & Topcoats



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BÜFA®-Gelcoats

- BÜFA®-Gelcoats are intensively tested in-house with colorimetric measurements. The usual difference in the shade of colour lies in a very narrow range, depending on batch. In spite of this, only one batch should be used for the same GRP component, if possible.
- BÜFA®-Gelcoats are delivered ready to use. The addition of any additives changes the characteristics of the gelcoat and the working quality described in the technical information sheet.
- BÜFA®-Gelcoats are preaccelerated as a rule. Desired differences in gel time are controlled by the peroxide that is used. Please get in touch with our technical service concerning the selection of a suitable curing system.
- BÜFA®-Gelcoats are mostly guaranteed for a shelf-life of 3 months at room temperature. Protect containers from frost and high temperatures. Before using, stir the contents of each container carefully. Gelcoats should be visually examined upon delivery or at the latest before they are used, also checking pot-life, viscosity and colours if necessary to make sure they meet specifications. The characteristics of the gelcoat are described in the respective technical information sheets.
- BÜFA®-Gelcoats used for mould making have special working instructions which are found in the respective technical information sheet.

- If you need any help selecting the right BÜFA®-Gelcoats in regard to its requirement profile, e. g. lightfastness and weather resistance, mechanical or thermal properties or chemical resistance, do not hesitate to get in touch with us. Your BÜFA team wishes you lots of success!



Gelcoats and Topcoats

Layers just 500-600 µm thick...

... and yet the selection of the right gelcoat is absolutely decisive for the final properties of fibre reinforced as well as cast moulded parts.

That's why quality is so important! Weather fastness, light fastness, degree of gloss, resistance to chemicals and corrosion and, of course, the mechanical properties of a gelcoat surface essentially depend on two factors: First of all, which materials were used to formulate the gelcoat and second, how well the gelcoat is applied in practice.

Optimal for all Applications

We guarantee that our BÜFA®-Gelcoats are made solely from raw materials the behaviour of which has been tested over the long term and which have proved themselves. Users have an extensive line of gelcoats and topcoats in brushing and spraying quality at their disposal.

All gelcoats and topcoats are distinguished by good working properties such as de-airing, flow and wetting of the mould. Optimal thixotropic properties prevent running on vertical surfaces and the reactivity of the base resins used in conjunction with the respective, especially formulated pre-acceleration ensure fast and thorough curing.

Range of Colours

The possibilities for pigmentation are practically unlimited. Along with currently more than 100 standard shades of colour which are always available, practically any nuance can be formulated according to customer wishes. Our entire range includes several thousand, formulated BÜFA® Pigment Pastes for tinting the entire range of gelcoats.

Our proven Eurotinter technology offers the highest degree of flexibility when tinting gelcoats. With this system, which is well-known in the paint and lacquer industry, several thousand pre-formulated shades of colour can be produced.

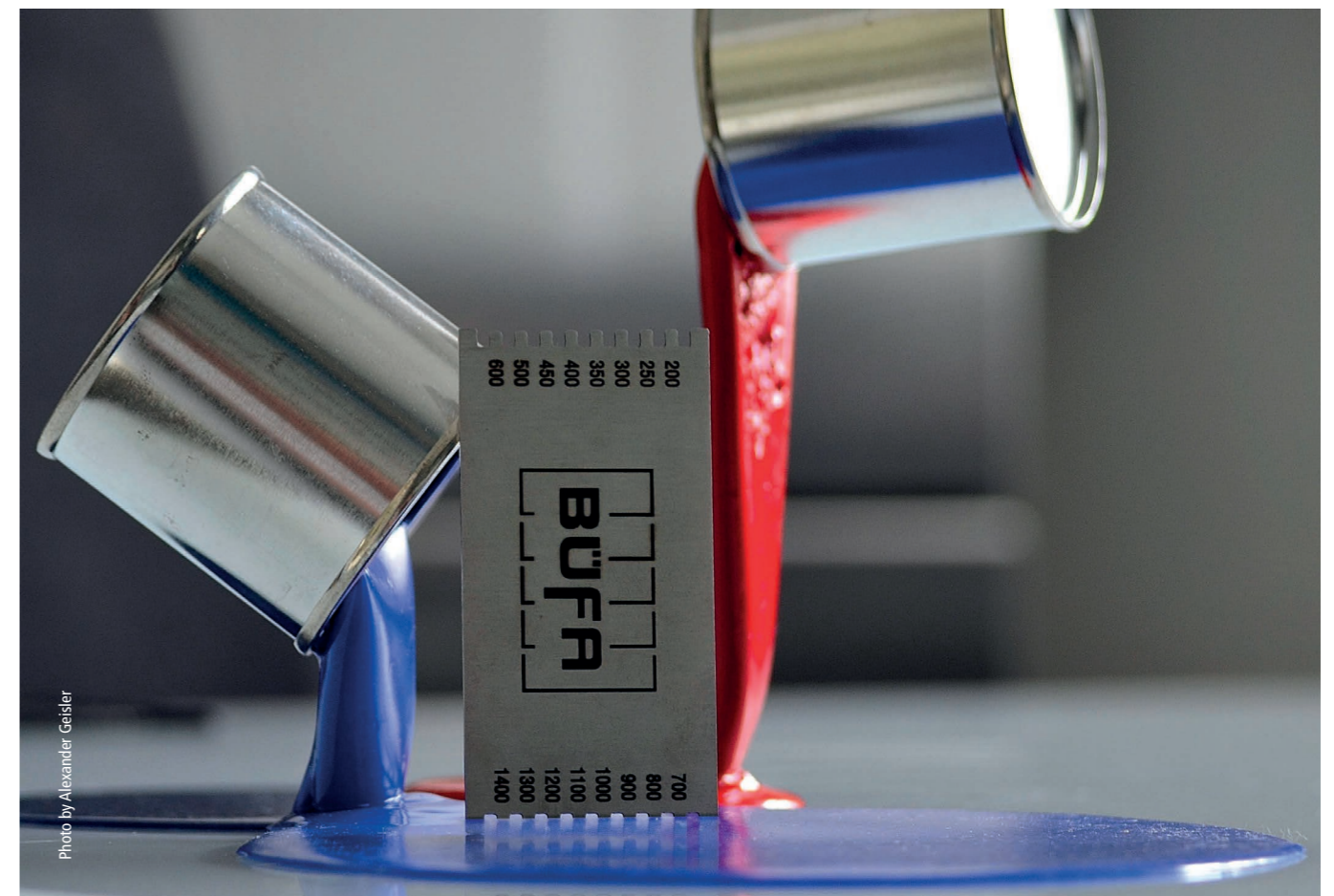


Photo by Alexander Geisler



External Application/ Hydrolysis Loads / Chemical Resistance

Product name	BÜFA®-Marine NPG-Gelcoat-S	BÜFA®-Marine NPG-Gelcoat-H	BÜFA®-Marine NPG-Topcoat-H	BÜFA®-Marine NPG-Spachtel (Filler)	BÜFA®-Gelcoat-S Transparent Clear
Art. No.	748-colour no.	749-colour no.	759-colour no.	737-colour no.	722-2010
Eurotinter	548-colour no.	549-colour no.	559-colour no.	not available	not available
Application	spraying quality	brushing quality	brushing quality	brushing quality	spraying quality
Resin base	IP/NPG	IP/NPG	IP/NPG	IP/NPG	IP/NPG
Pigmentation	practically unlimited	practically unlimited	practically unlimited	limited	transparent
Viscosity [mPa.s] – Spindle/rpm	18,000 – 4/4	23,000 – 4/4	22,000 – 4/4	345,000 – 95/5	14,000 – 4/4
Styrene content [%]	38	34	31	31	40
Peroxide / accelerator	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	4 % MEKP low reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated
Gel time [min]	12	14	14	9	12
Tmax [°C]	165	165	165	165	185
Tensile strength [MPa]	85	85	85	85	85
Tensile E-modulus [MPa]	3,720	3,720	3,720	3,720	3,700
Elongation at break [%]	3.5	3.5	3.5	3.5	4
HDT [°C]	95	95	95	95	94
Range of use / comments	Boat construction, for high chemical, thermal or hydrolytic loads*5, certification GL*1, LR*2	Boat construction, for high chemical, thermal or hydrolytic loads*5, certification GL*1, LR*2	Sealant for high chemical, thermal or hydrolytic loads*5	Filler for sealing and repairing strongly weathered parts with hydrolysis loads	Transparent, weather resistant gelcoat

Product name	NEOGEL®-NPG 8373	NEOGEL®-NPG 8375	NEOGEL®-ECO 9373
Art. No.	610-colour no.	624-colour no.	620-colour no.
Eurotinter	610-colour no.	624-colour no.	620-colour no.
Application	spraying quality	brushing quality	spraying quality
Resin base	IP/NPG	IP/NPG	IP/NPG
Pigmentation	practically unlimited	practically unlimited	limited
Viscosity [mPa.s] – Spindle/rpm	5,800 – 4/20 *3	7,000 – 4/20 *3	39,000 – 4/2 *3
Styrene content [%]	44	37	25
Peroxide / accelerator	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated
Gel time [min]	8 *3	8 *3	9 *3
Tmax [°C]	195 *3	190 *3	170 *3
Tensile strength [MPa]	85	85	83
Tensile E-modulus [MPa]	3,700	3,700	3,500
Elongation at break [%]	4	4	> 3.5
HDT [°C]	94	94	70
Range of use / comments	For high chemical, thermal or hydrolytic loads*5, certification LR*2	For high chemical, thermal or hydrolytic loads*5, certification LR*2	Gelcoat for external components, boat construction, low emission, certification LR*2, best weathering quality in white shades



Highest surface quality that looks like lacquer!

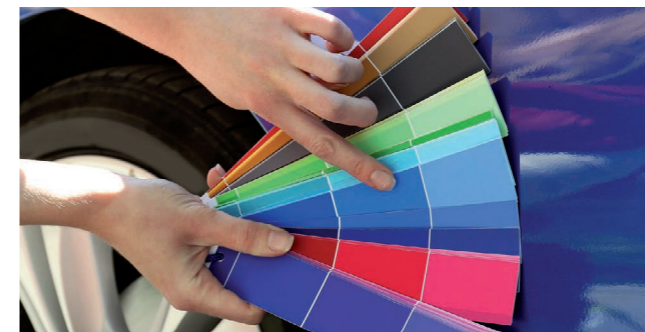
BÜFA®-Ambition-Gelcoat

As Europe's leading supplier of gelcoats, BÜFA Composites continuously invests in the further development of its range of products. One result is the highly brilliant BÜFA®-Ambition-Gelcoat on an isophthalic acid resin base. BÜFA®-Ambition can be used for a number of applications in which surface quality has the highest priority.



Product advantages:

- Production of especially brilliant colours
- Outstanding weathering properties with excellent gloss retention
- For the highest surface quality (looks like lacquer)
- Unique colour accuracy, colour formulations according to customer wishes
- BÜFA®-Ambition is REACH compliant
- Convincing combination of flexibility and good mechanical properties when it comes to tensile and flexural strength



Advantages when processing the product:

- Reliable, uniform quality from batch to batch
- Good stability, optimal flow
- Outstanding hiding power
- No separation of pigments
- Eliminates additional secondary finishing

Processing methods:

- Hand lay-up and spray lay-up
- Available qualities: gelcoats as well as topcoats

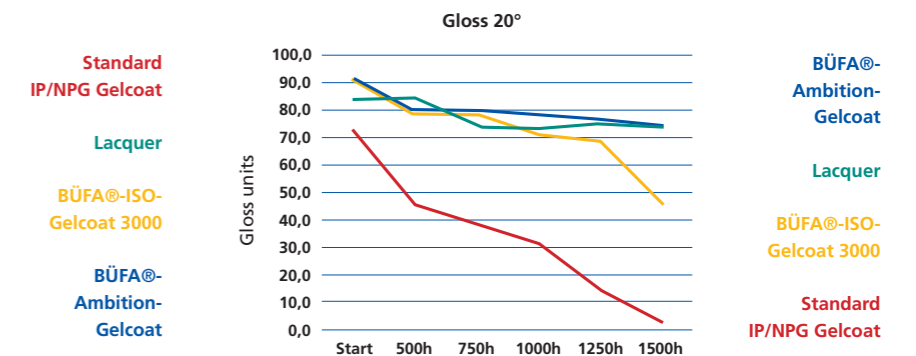
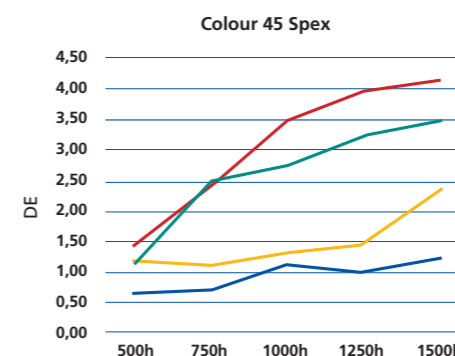
Special features:

- Customer-specific colour matching, using especially colour stable pigments
- Weathering test is the basis for releasing the product, test duration approx. 3 months

Production method:

- Batch-wise

Results after weathering according to EN ISO 4892-2:





Gelcoat with the best weathering results!



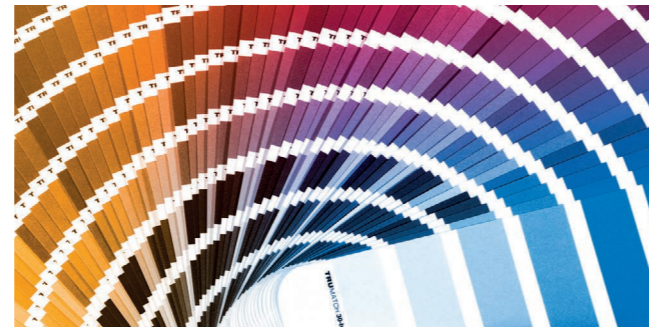
BÜFA®-ISO-Gelcoat 3000

The BÜFA product portfolio includes a number of gelcoats for the most different application areas. BÜFA®-ISO-Gelcoat 3000 can be used for a wide spectrum of applications in which brilliant shades of colour and high UV resistance are required – and that with a good price/performance ratio!



Your product advantages:

- Unique colour accuracy
- With stands strong weathering yet maintains gloss
- BÜFA®-ISO-Gelcoat 3000 is REACH compliant



Advantages in product processing:

- Fast and cost effective processing
- Eliminates additional secondary finishing
- Hand lay-up (BÜFA®-ISO-Gelcoat 3000-H): Due to the higher formulated working viscosity (compared with 3000-S), it can be applied in one working operation
- Spray application (BÜFA®-ISO-Gelcoat 3000-S): Good stability, no separation of pigments

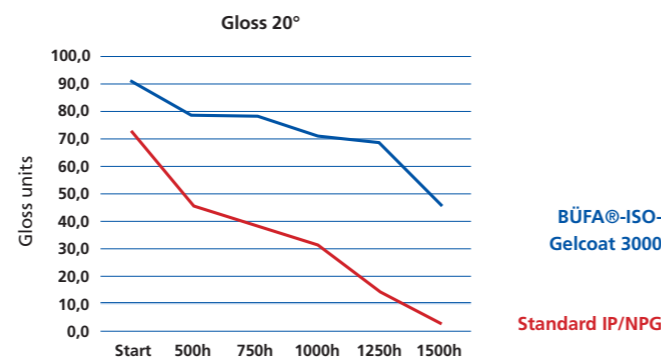
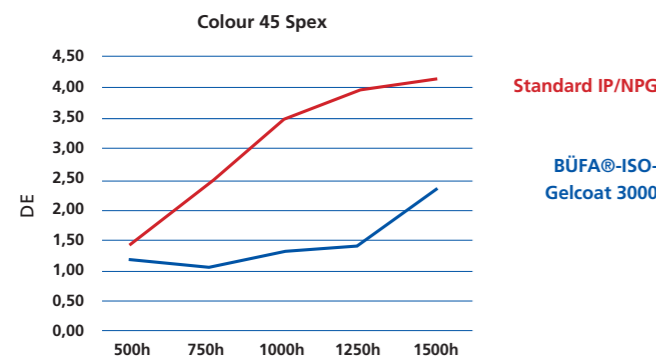
Processing methods:

- Hand lay-up and spray lay-up applications
- Available qualities Gelcoats as well as topcoats

Production method:

- Batchwise / tinting

Results of weathering according to EN ISO 4892-2:



External Application / UV-resistance

Product name	BÜFA®-Ambition-Gelcoat-S	BÜFA®-Ambition-Gelcoat-H	BÜFA®-ISO-Gelcoat-3000-S	BÜFA®-ISO-Gelcoat-3000-H	BÜFA®-Arctic-Gelcoat-ISO-S	BÜFA®-Arctic-Gelcoat-ISO-H
Art. No.	744-colour no.	745-colour no.	771-colour no.	772-colour no.	775-colour no.	776-colour no.
Eurotinter	not available	not available	571-colour no.	572-colour no.	575-colour no.	576-colour no.
Application	spraying quality	brushing quality	spraying quality	brushing quality	spraying quality	brushing quality
Resin base	IP	IP	IP	IP	IP	IP
Pigmentation	practically unlimited	practically unlimited	practically unlimited	practically unlimited	practically unlimited	practically unlimited
Viscosity [mPa.s] – Spindle/rpm	19,000 – 4/4	36,500 – 6/5	20,000 - 4/4	37,500 - 6/5	13,500 – 4/4	17,500 – 4/4
Styrene content [%]	38	31	37	30	34	29
Peroxide / accelerator	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	1.5 % MEKP medium reactive, pre-accelerated	1.5 % MEKP medium reactive, pre-accelerated
Gel time [min]	10	12	9	12	14	16
Tmax [°C]	190	170	190	170	165	155
Tensile strength [MPa]	85	85	85	85	80	55
Tensile E-modulus [MPa]	3,400	3,400	3,400	3,400	3,900	3,400
Elongation at break [%]	4	4	4	4	3.9	5.3
HDT [°C]	91	91	91	91	90	88
Range of use / comments	Gelcoat with highest weather resistance and gloss retention on varnish level	Highly thixotropic gelcoat with highest weather resistance and gloss retention on varnish level	Gelcoat with very good weather resistance and gloss retention	Highly thixotropic gelcoat with very good weather resistance and gloss retention, WRAS potable water approval 6*	For strong weather or hydrolysis loads, certification GL* ¹	For strong weather or hydrolysis loads, certification GL* ¹

Product name	BÜFA®-Arctic-Topcoat-ISO-H	BÜFA®-Arctic-Gelcoat-SP
Art. No.	786-colour no.	756-colour no.
Eurotinter	586-colour no.	556-colour no.
Application	brushing quality	brushing quality
Resin base	IP	IP
Pigmentation	practically unlimited	practically unlimited
Viscosity [mPa.s] – Spindle/rpm	17,500 – 4/4	425,000 – 95/5
Styrene content [%]	29	29
Peroxide / accelerator	1.5 % MEKP medium reactive, pre-accelerated	1.5 % MEKP medium reactive, pre-accelerated
Gel time [min]	14	16
Tmax [°C]	165	155
Tensile strength [MPa]	55	55
Tensile E-modulus [MPa]	3,400	3,400
Elongation at break [%]	5.3	3.9
HDT [°C]	88	88
Range of use / comments	Sealant for components subjected to strong weather and hydrolysis loads	Filler for sealing and repairing components with strong weather and hydrolysis loads

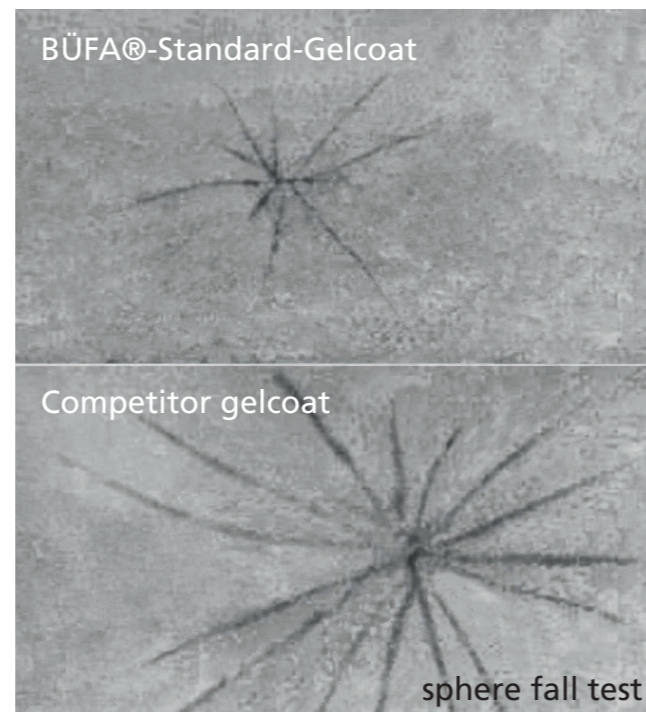


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BÜFA®-Standard Gelcoats and -Topcoats

With this line of products, BÜFA Composite Systems sets new standards in the area of "performance gelcoats" for the GRP industry. An isophthalic acid modified, low-styrene resin formulation is the basis for all BÜFA®-Standard Gelcoats and Topcoats.

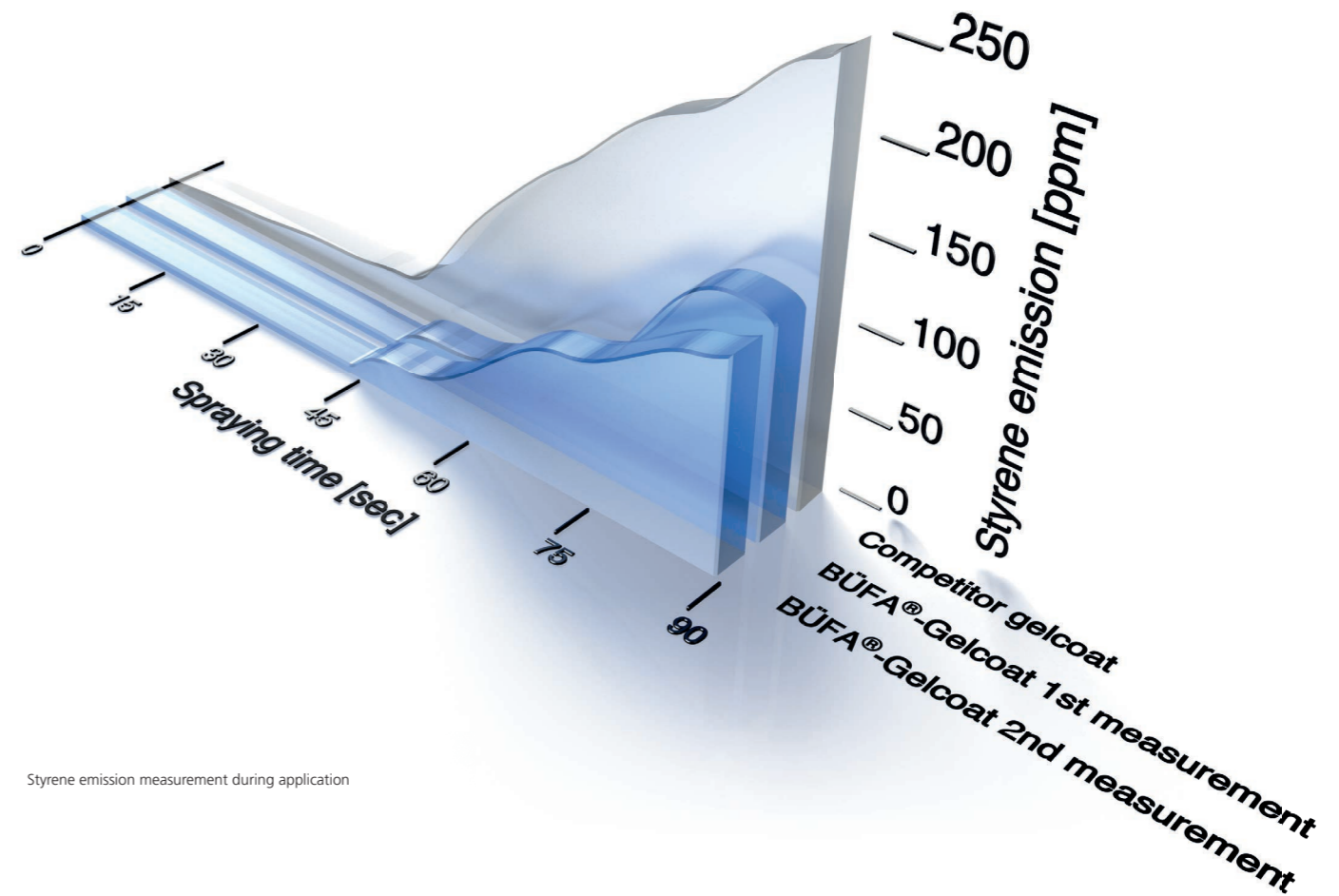


Advantages of BÜFA®-Standard Gelcoats and Topcoats

- This line of products convinces through significantly low emission of styrene and because of its good working properties. Gelcoat surfaces produced with BÜFA®-Standard Gelcoat are also convincing in their product class because of their excellent weathering stability.
- A flexibilised formulation of the material guarantees high impact resistance which results in less tendency of the gelcoat surfaces to crack, particularly in the case of large components (e.g. machine housing for wind power plants).
- For sealing the back sides of laminates, pre-accelerated BÜFA®-Standard Topcoats in the same colour and quality are available. All of the topcoats are formulated with special paraffin to ensure tack-free curing at working temperatures up to max. 35 °C.
- BÜFA®-Standard Gelcoats and Topcoats are available ready to use in the colours light grey (RAL 7035), pure white (RAL 9010) and agate grey (RAL 7038).
- A ready to use base formulation that can be individually tinted through tinting technology is also available.

What distinguishes the BÜFA®-Standard Gelcoat line of products?

- Saves time, materials and working steps
- Pre-accelerated
- GL approvals
- Good weathering properties
- Low emission of styrene
- Excellent mechanical properties



Styrene emission measurement during application

Standard Application

Product name	BÜFA®-Standard-Gelcoat-S	BÜFA®-Standard-Gelcoat-H	BÜFA®-Standard-Topcoat-S	BÜFA®-Standard-Topcoat-H	BÜFA®-Standard-Gelcoat-H
Article group	764-colour no.	765-colour no.	766-colour no.	767-colour no.	768-colour no.
Eurotinter	564-colour no.	565-colour no.	566-colour no.	567-colour no.	568-colour no.
Application	spraying quality	brushing quality	spraying quality	brushing quality	brushing quality
Base resin	OP/IP	OP/IP	OP/IP	OP/IP	OP/IP
Pigmentation	nearly unlimited	nearly unlimited	nearly unlimited	nearly unlimited	nearly unlimited
Viscosity [mPa.s] – Spindle/rpm	16,000 – 4/4	34,000 – 4/4	13,500 – 4/4	34,000 – 4/4	51,000 – 6/5
Styrene content [%]	30	28	29	27	28
Peroxide / accelerator	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated
Gel time [min]	11	17	11	17	9
Tmax [°C]	165	155	165	155	165
Tensile strength [MPa]	48	48	48	48	48
Tensile E-modulus [MPa]	3,000	3,000	3,000	3,000	3,000
Elongation at break [%]	6.5	6.5	6.5	6.5	6.5
HDT [°C]	80	80	80	80	80
Range of use / comments	Gelcoat for machine parts and technical components, low-styrene, certification GL *1	Gelcoat for machine parts and technical components, low-styrene, certification GL *1	Sealant for technical components that are not subjected to permanent water loads, certification GL *1	Sealant for technical components that are not subjected to permanent water loads, certification GL *1	Gelcoat for machine parts and technical components, low-styrene, certification GL *1



Industry- and Special Application

Product name	BÜFA®-Sanitary-Gelcoat-S	BÜFA®-Sanding-Gelcoat-S light grey	BÜFA®-Industry-Gelcoat-2.0-S
Art. No.	712-XXXX	722-7335	669-colour no.
Application	spraying quality	spraying quality	spraying quality
Resin base	IP/NPG	IP	OP
Pigmentation	various white shades	light grey	limited
Viscosity [mPa.s] – Spindle/rpm	17,000 – 5/5	17,000 – 5/5	18,000 – 4/4
Styrene content [%]	34	21	31
Peroxide / accelerator	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated
Gel time [min]	9	21	10
Tmax [°C]	170	110	170
Tensile strength [MPa]	75	90	78
Tensile-E-modulus [MPa]	3,800	3,700	4,300
Elongation at break [%]	3,4	4,6	5
HDT [°C]	90	90	98
Range of use / comments	Sanitary gelcoat with increased scratch resistance	Gelcoat for moulded parts that can be varnished, easily sanded	Gelcoat for technical and industrial components

Product name	BÜFA®-VE-Gelcoat	BÜFA®-Conductive-Gelcoat black	BÜFA®-VEU-Conductive-Gelcoat black
Art. No.	724-colour no.	722-0399	722-0262
Application	brushing quality	brushing quality	brushing quality
Resin base	BPA/VE	IP/BPA/VEU	BPA/VEU
Pigmentation	limited	black	black
Viscosity [mPa.s] – Spindle/rpm	25,000 – 5/5	13,500 – 6/20	13,500 – 6/20
Styrene content [%]	37	34	34
Peroxide / accelerator	2 % CuHP/Promotor + 2 % 742-0062, not pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP low reactive, pre-accelerated
Gel time [min]	13	22	16
Tmax [°C]	155	116	160
Tensile strength [MPa]	95	not determined	90
Tensile-E-modulus [MPa]	3,600	not determined	3,500
Elongation at break [%]	6.1	approx. 10	3 - 4
HDT [°C]	105	approx. 90	145
Range of use / comments	Vinyl ester gelcoat for extreme chemical loads*5, not weather resistant	Gelcoat for moulded parts that not only require electrical conductivity but also basic fire protection	Gelcoat for moulded parts that not only require electrical conductivity but also chemical resistance*5



Tooling Gelcoats

Product name	BÜFA®-Conductive-Tooling GC-S natur	BÜFA®-VE-Tooling-Gelcoat-S nature	BÜFA®-VE-Tooling-Gelcoat-H nature
Art. No.	720-0100 (nature)	720-1000	720-2000
Application	spraying quality	spraying quality	brushing quality
Resin base	Hybrid	BPA/VEU	BPA/VEU
Pigmentation	520-0101 (black) / 520-0102 (green)	nature	nature
Viscosity [mPa.s] – Spindle/rpm	24,000 - 4/4	33,000 -4/2	53,000 -4/2
Styrene content [%]	49	40	40
Peroxide / accelerator	2 % MEKP moderately reactive, pre-accelerated	2 % MEKP moderately reactive, pre-accelerated	2 % MEKP moderately reactive, pre-accelerated
Gel time [min]	15	14	14
Tmax [°C]	195	185	185
Elongation at break [%]	> 3	> 3	> 3
HDT [°C]	120	130	110
Range of use / comments	Conductive properties [10 ⁶ Ω], thixotropic mould making gelcoat, good gloss performance,	GRP mould-making, available in 4 shades of colour and a non-tinted version, not weather resistant	GRP mould-making, available in 4 shades of colour and a non-tinted version, not weather resistant



To achieve the greatest contrast to the moulded part, black is the optimal colour for white products. Green is the optimal colour for white products with dark blue stripes. Orange is the commonly used colour for light blue products. Grey is the last colour to complete the series of tooling gelcoats.

Available Gelcoat Colours



Colour	Art. No. spraying quality	Art. No. brushing quality
Black	520-1104	520-2107
Light Green	520-1108	520-2109
Orange	520-1110	520-2111
Grey	520-1112	520-2113
Nature	720-1000	720-2000



BÜFA®-Barriercoat – Enhanced surface quality

Take advantage of the improved surface quality achieved with BÜFA®-Barriercoat

BÜFA®-Barriercoat is applied between the gelcoat and the laminate build up.

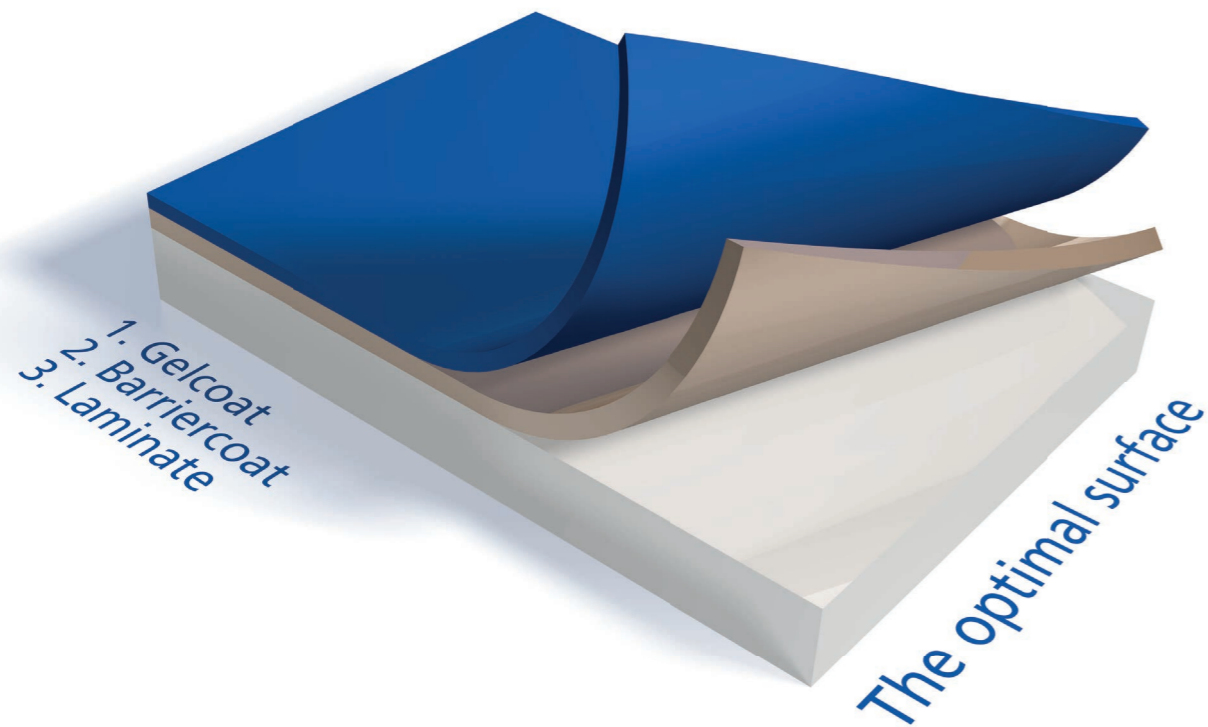
As a kind of additional Gelcoat layer, BÜFA®-Barriercoat improves surface cosmetics and resistance against osmosis. BÜFA®-Barriercoat is based on a vinyl ester resin. Due to its excellent mechanical properties and low shrink curing behaviour, it will help to avoid fibre print through on composite material surfaces. Due to its low water absorption, special composition and excellent chemical resistance, the osmosis resistance of a laminate with BÜFA®-Barriercoat will improve substantially.

Depending on build-up and chemical exposure, first layer of laminates behind the gelcoat can potentially be replaced. BÜFA®-Barriercoat may be used in applications such as swimming pools, automotive parts and GRP toolings.

BÜFA®-Barriercoat is available in a range of different colours.

Benefits for you at a glance:

- Protection against osmosis
- Substantial improvement of the surface quality
- Can be used in spray lay-up as well as in hand lay-up processes
- Excellent price performance ratio
- Low styrene content
- Time saving by replacing the first layer of resin
- 722-1965 GL approval



BÜFA®-Barriercoat is available in different colours:

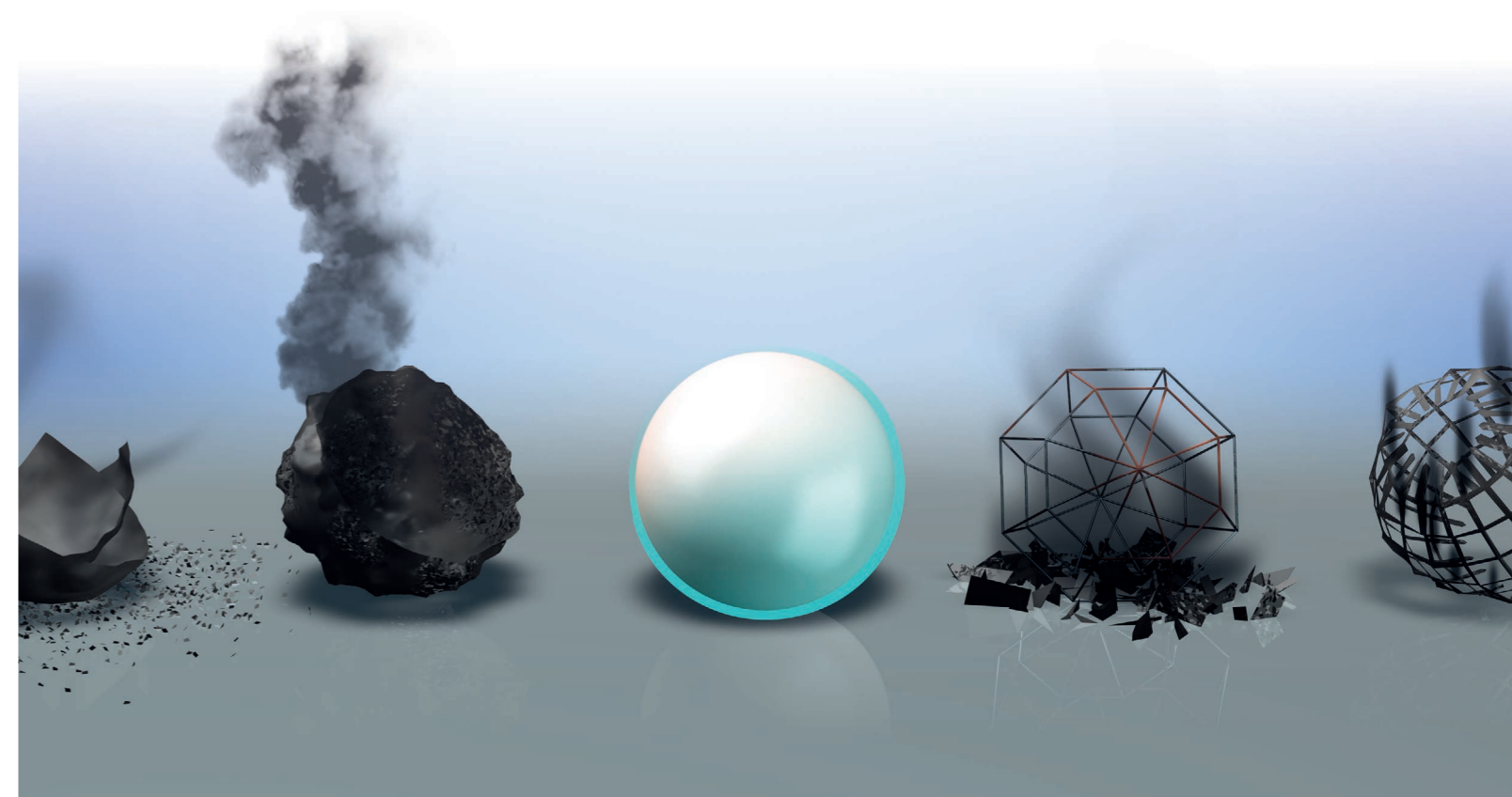
Art. No.	Product name	Colour	Application
722-1965	BÜFA®-VE Barriercoat SV 2 (flex)	Beige	spraying quality
722-1966	BÜFA®-VE Barriercoat SV	Beige	spraying quality
722-1967	BÜFA®-VE Barriercoat SV Yellow	Yellow	spraying quality
722-1968	BÜFA®-VE Barriercoat SV Blue	Blue	spraying quality



Fire Protection Gelcoats

Gelcoat name	BÜFA®-Firestop GC S 230	BÜFA®-Firestop GC S 250	BÜFA®-Firestop GC S 260	BÜFA®-Firestop GC S 270	BÜFA®-Firestop GC S 285	BÜFA®-Firestop GC S 300
Art. No	714-2300	708-colour (spraying quality) / 728-colour (brushing quality)	714-2600	714-2702	714-2852	714-3000
Resin base	IP	IP	OP / NPG	VE / DCPD	IP	VE / DCPD
Non-volatile matter [%]	82	Colour 708 = 77 Colour 728 = 84	76	84	80	85
Viscosity [mPa.s]	30,000	Colour 708 = 7,500 Colour 728 = 30,000	11,500	28,000	14,000	25,000
Elongation at break [%]	5	8.2	3.4	3	4.5	2.5
Tensile strength [MPa]	50	52	56	45	48	45
HDT [°C]	59	41	39	60	36	85
Comments	Gelcoat in a spraying quality with increased fire protection properties	Gelcoat in a spraying quality with good fire protection properties	Gelcoat in a spraying quality with increased fire protection properties	Gelcoat in a hand and spraying quality with highest fire protection properties	Gelcoat in a hand and spraying quality with highest fire protection properties	Gelcoat in a spraying quality with highest fire protection properties

Chemical properties	DCPD: dicyclopentadiene	OP: orthophthalic acid	IP: isophthalic acid	VE: vinyl ester	NPG: neopentyl glycol
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Gelcoats and Topcoats



BÜFA®-Swim-NPG Gelcoats and Topcoats

Swimming pools are eye-catchers and enhance the quality of life. After they have been applied, the BÜFA®-Swim-NPG Gelcoats and Topcoats give pools a high quality surface.

What distinguishes the BÜFA®-Swim-NPG series?

- Based on ISO/NPG quality
- Excellent resistance to hydrolysis
- Highly UV and weather resistant
- Individual colours, tested and released according to the AVK chlorine test method
- A special laminate construction combined with BÜFA®-Swim-NPG Gelcoat allows permanent utilisation at elevated water temperatures

A variety of colours

	Blue 0823		Papyrus white 9797
	Pool blue 5494		White 9400
	Lime green 6349		Beige 1309
	Light blue 5516		Blue 5484



Gelcoats and Topcoats



Swimming Pool Applications

Product name	BÜFA®-Swim-NPG-Gelcoat-S	BÜFA®-Swim-NPG-Gelcoat-H	BÜFA®-Swim-NPG-Topcoat-S	BÜFA®-Swim-NPG-Topcoat-H
Art. No.	752-colour no.	753-colour no.	762-colour no.	763-colour no.
Application	spraying quality	brushing quality	spraying quality	brushing quality
Resin base	IP/NPG	IP/NPG	IP/NPG	IP/NPG
Pigmentation	limited	limited	limited	limited
Viscosity [mPa.s] – Spindle/rpm	18,000 – 4/4	29,000 – 5/5	18,000 – 4/4	20,000 – 5/5
Styrene content [%]	38	31	38	31
Peroxide / accelerator	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated	2 % MEKP medium reactive, pre-accelerated
Gel time [min]	12	14	14	9
Tmax [°C]	165	165	165	165
Tensile strength [MPa]	85	85	85	85
Tensile E-modulus [MPa]	3,720	3,720	3,720	3,720
Elongation at break [%]	3.5	3.5	3.5	3.5
HDT [°C]	95	95	95	95
Range of use / comments	Gelcoat for swimming pools, colours especially tested according to the AVK chlorine test *4	Gelcoat for swimming pools, colours especially tested according to the AVK chlorine test *4	Topcoat for swimming pools, colours especially tested according to the AVK chlorine test *4	Topcoat for swimming pools, colours especially tested according to the AVK chlorine test *4

The legend refers to the values of the category of Gelcoats and Topcoats

Resin base	Comments	Reactivity	Viscosity	Accelerator	Mechanical values
IP - isophthalic acid	*1 Approval according to GL (Germanischer Lloyd)	Reactivity values are orientation values measured on a 100 g sample at 20 °C or 25 °C (*4)	Mean values measured with Brookfield DV II at 20 °C or 25 °C *3	742-0399 BÜFA®-Accelerator Complex 0399	Measured on cured, pure resin samples made of the base resin conditioned according to information in the Technical Information Sheet
OP - orthophthalic acid					
VE - vinyl ester	*2 Approval according to Lloyd's Register	Gel time: Time from 20 °C to 30 °C (mean value) or from 25 °C to 35 °C (mean value) *4	Further values: e.g. measured with spindle 4 at 4 rpm (4/4)	742-0062 BÜFA®-Accelerator Co 1	Tensile strength according to ISO 527/2
DCPD - dicyclopentadiene	*3 Measured at 25 °C				
BPA - bisphenol A	*4 Industrievereinigung Verstärkte Kunststoffe e. V., Enclosure 2 of the Manufacturing Guideline on GRP Swimming Pools, section 6.1	Tmax: Maximum temperature of the 100 g sample (mean value)			Tensile E-modulus according to ISO 527/2
VEU - vinyl ester urethane					
NPG - neopentylglycol	*5 For use with chemical loads, please contact our Technical Service Department				Elongation at break according to ISO 527/2
	*6 Approval according to WRAS (Water Regulations Adisory Scheme)				HDT according to ISO 75-A

The Gelcoat Applications at a glance



The recommendations presented are only a few of the possibilities for gelcoat applications. For further information, get in touch with our Technical Service.

Gelcoat	Art. No.	Product name	Description	Resin base	Application	Viscosity [mPas] - Spindle/rpm	Gel time [min]	Marine		Swimming pools	Auto-motive	Sanitary	Mould making	Wind energy		Travel trailers/ Caravans	Transport utility vehicles		Chemical resistance
								Exterior	Interior					Rotorblades	Casing		varnished	unvarnished	
Industry	669-XXXX	BÜFA®-Industry-Gelcoat 2.0	Gelcoat for technical and technical components	OP	spraying quality	18,000 - 4/4	10												
Standard	764-XXXX	BÜFA®-Standard-Gelcoat-S	Machine parts, industrial moulded parts, low-styrene, approved by GL *1	OP/IP	spraying quality	16,000 - 4/4	11		✓					✓			✓		
	765-XXXX	BÜFA®-Standard-Gelcoat-H	Machine parts, industrial moulded parts, low-styrene, approved by GL *1	OP/IP	brushing quality	34,000 - 4/4	17		✓						✓		✓		
	766-XXXX	BÜFA®-Standard-Topcoat-S	Sealant for industrial moulded parts that are not permanently subjected to water loads, approved by GL *1	OP/IP	spraying quality	13,500 - 4/4	11		✓	✓	✓				✓	✓		✓	
	767-XXXX	BÜFA®-Standard-Topcoat-H	Sealant for industrial moulded parts that are not permanently subjected to water loads, approved by GL *1	OP/IP	brushing quality	34,000 - 4/4	17		✓	✓	✓				✓	✓		✓	
	768-XXXX	BÜFA®-Standard-Gelcoat-H	Machine parts, industrial moulded parts, low-styrene, high thixotropy	OP/IP	brushing quality	51,000 - 6/5	9		✓						✓			✓	
Exterior application	744-XXXX	BÜFA®-Ambition-Gelcoat-S	Gelcoat with highest weather resistance and gloss retention, on varnish level	IP	spraying quality	13,500 - 4/4	14		✓		✓					✓		✓	
	745-XXXX	BÜFA®-Ambition-Gelcoat-H	Highly thixotropic gelcoat with highest weather resistance and gloss retention, on varnish level	IP	brushing quality	17,500 - 4/4	16		✓		✓					✓		✓	
	771-XXXX	BÜFA®-ISO-Gelcoat-3000-S	Gelcoat with very good weather resistance and gloss retention.	IP	spraying quality	20,000 - 4/4	9		✓		✓				✓	✓		✓	
	772-XXXX	BÜFA®-ISO-Gelcoat-3000-H	Highly thixotropic gelcoat with very good weather resistance and gloss retention, WRAS potable water approval, 6*	IP	brushing quality	37,500 - 6/5	12		✓		✓				✓	✓		✓	
	775-XXXX	BÜFA®-Arctic-Gelcoat-ISO-S	For strong weathering or hydrolytic loads, fulfills approved by GL *1	IP	spraying quality	13,500 - 4/4	14	✓	✓		(✓)				✓	✓		✓	
	776-XXXX	BÜFA®-Arctic-Gelcoat-ISO-H	For strong weathering or hydrolytic loads, fulfills approved by GL *1	IP	brushing quality	17,500 - 4/4	16	✓	✓		(✓)				✓	✓		✓	
	786-XXXX	BÜFA®-Arctic-Topcoat-ISO-H	For sealing parts subjected to strong weathering and hydrolytic loads	IP	brushing quality	17,500 - 4/4	14	✓	✓		(✓)				✓	✓		✓	
	756-XXXX	BÜFA®-Arctic-Gelcoat-SP	Gelcoat filler for sealing and repairing parts subjected to strong weathering and hydrolytic loads	IP	brushing quality	425,500 - 95/5	16	✓	✓		(✓)				✓	✓		✓	
Exterior application / hydrolysis loads / chemical resistance	748-XXXX	BÜFA®-Marine-NPG-Gelcoat-S	Boat construction, for high hydrolytic loads, approved by GL, LR *1, *2	IP/NPG	spraying quality	18,000 - 4/4	12	✓	✓			✓							(✓)
	749-XXXX	BÜFA®-Marine-NPG-Gelcoat-H	Boat construction, for high hydrolytic loads, approved by GL, LR *1, *2	IP/NPG	brushing quality	23,000 - 4/4	14	✓	✓			✓							(✓)
	759-XXXX	BÜFA®-Marine-NPG-Topcoat-H	For sealing parts subjected to strong weathering and hydrolytic loads	IP/NPG	brushing quality	22,000 - 4/4	14	✓	✓										(✓)
	737-XXXX	BÜFA®-Marine-NPG Spachtel	Filler for sealing and repairing parts that are strongly weathered or have been subjected to hydrolysis loads	IP/NPG	brushing quality	345,000 - 95/5	12	✓	✓			✓							
	610-XXXX	NEOGEL®-NPG 8373	Boat construction, for high hydrolytic loads, approved by LR *2	IP/NPG	spraying quality	5,800*3- 4/20	8	✓	✓	(✓)		✓							(✓)
	624-XXXX	NEOGEL®-NPG 8375	Boat construction, for high hydrolytic loads, approved by LR *2	IP/NPG	brushing quality	7,000*3- 4/20	8*3	✓	✓	(✓)		✓							(✓)
	722-2010	BÜFA®-Gelcoat-S Transparent Clear	Transparent and weather resistant gelcoat	IP/NPG	spraying quality	14,000 - 4/4	12		(✓)		✓	✓				✓			
	620-XXXX	NEOGEL®-Eco 9373 W-2	Gelcoat for sanitary/boat construction/exterior parts, low-emission, best weathering quality in white shades	IP/NPG	spraying quality	39,000*3- 4/2	9	✓	✓			✓				✓			
Swimming Pools	752-XXXX	BÜFA®-Swim-NPG-Gelcoat-S	Gelcoat for swimming pools, colours specially tested according to the AVK chlorine test *4	IP/NPG	spraying quality	18,000 - 4/4	12	✓		✓									
	753-XXXX	BÜFA®-Swim-NPG-Gelcoat-H	Gelcoat for swimming pools, colours specially tested according to the AVK chlorine test *4	IP/NPG	brushing quality	29,000 - 5/5	14	✓		✓									
	762-XXXX	BÜFA®-Swim-NPG-Topcoat-S	Topcoat for swimming pools, colours specially tested according to the AVK chlorine test *4	IP/NPG	spraying quality	18,000 - 4/4	14	✓		✓									
	763-XXXX	BÜFA®-Swim-NPG-Topcoat-H	Topcoat for swimming pools, colours specially tested according to the AVK chlorine test *4	IP/NPG	brushing quality	20,000 - 5/5	9	✓		✓									
Mould making	720-0100	BÜFA®-Conductive-Tooling GC-S nature	Thixotropic mould making gelcoat with conductive properties [10 ⁶ Ω], good gloss performance	Hybrid	spraying quality	24,000 - 4/4	15						✓						
	720-1000	BÜFA®-VE-Tooling-Gelcoat-S	Gelcoat for GRP tooling, available in black, green, orange, grey	BPA/VEU	spraying quality	33,000 - 4/2	14						✓						
	720-2000	BÜFA®-VE-Tooling-Gelcoat-H	Gelcoat for GRP tooling, available in black, green, orange, grey	BPA/VEU	brushing quality	53,000 - 4/2	14						✓						
Special	724-XXXX	BÜFA®-VE-Gelcoat	Vinyl ester gelcoat for extreme chemical loads, not resistant to weather, not pre-accelerated	VE	brushing quality	25,000 - 5/5	13												(✓)
	722-1965	BÜFA®-VE-Barriercoat-SV 2	Second layer of gelcoat between the gelcoat and laminate as a barrier against shrinkage marks and osmosis / certification GL 1*	VE	spraying quality	25,000 - 4/2	25	✓	✓	✓	✓		✓			✓	✓	✓	
	722-1966	BÜFA®-VE-Barriercoat-SV	Second layer of gelcoat between the gelcoat and laminate as a barrier against shrinkage marks and osmosis	VE	spraying quality	24,500 - 4/3	13	✓	✓	✓	✓		✓			✓	✓	✓	
	722-0399	BÜFA®-Conductive Gelcoat black	Gelcoat for moulded parts that require not only electrical conductivity but also basic fire protection	IP/BPA/VEU	brushing quality	13,500 - 6/20	22												(✓)
	722-0262	BÜFA®-VEU Conductive Gelcoat black	Gelcoat for moulded parts that not only require electrical conductivity but also chemical resistance *5	BPA/VEU	brushing quality	13,500 - 6/20	16												
	712-XXXX	BÜFA®-Sandling Gelcoat S light grey	Gelcoat for paintable moulded parts	IP	spraying quality	17,500 - 5/5	21				(✓)							✓	
	722-7355	BÜFA®-Sanitary Gelcoat S	Sanitary Gelcoat with increased scratch resistance	IP/NPG	spraying quality	17,500 - 5/5	9						✓						

Abbreviations for base resins: IP - Isophthalic acid, OP - Orthophthalic acid, VE-Vinylester, NPG - Neopentylglycol, BPA/VEU - Bisphenol A Vinylester Urethan
 Notes: *1 - GL approval (Germanischer Lloyd)
 *2 - Lloyd's approval (Lloyd's register)
 *3 - measured at 25 °C
 *4 - Industrievereinigung Verstärkte Kunststoffe e. V., Enclosure 2 of the Manufacturing Guideline on GRP Swimming Pools, section 6.1
 *5 - For use with chemical loads, please contact our Technical Service Department
 *6 - WRAS approval (Water Regulations Advisory Scheme)

Viscosity: Mean values measured with Brookfield DV II at 20 °C, *3 Mean values measured with Brookfield DV II at 25 °C
 Further specifications: e. g. measured with spindle 4 at 4 rpm (4/4)
 The gel time stated was determined based on the information given in the Technical Data Sheets.
 (✓) conditionally suitable
 ✓ suitable
 XXXX Serial colour number



PLEASE OBSERVE!



- | | | | |
|---------------------|--|---|---|
| | | 1. Delivery | <ul style="list-style-type: none"> - Quality - Shade of colour - Quantity |
| | | 2. Storage | <ul style="list-style-type: none"> - Store under roof - Protect from direct sunlight - Storage temperature approx. 20 °C - Humidity 50-75 % |
| | | 3. Mould release and preparation of the material | <ul style="list-style-type: none"> - Protection/protective clothing for users - Room temperature between 18-25 °C - Manufacturer's recommendations for mould release - Homogenous stirring of the material in the original container |
| | | 4. Gelcoat application: | <ul style="list-style-type: none"> - Use only the specified hardener - Observe quantity to be added in % (1.5-2.5) |
| Hand lay-up: | | <ul style="list-style-type: none"> - Ideally in two layers each 300-400 µm - Make sure the layers are uniformly thick | |
| | | Spray application: | <ul style="list-style-type: none"> - Adjust machine parameters according to instructions given by the manufacturer - Apply two layers. The first layer should be approx. 200 µm. With the second layer, a total layer thickness of approx. 700-800 µm should be applied - Lead the gun lengthwise and crosswise vertical to the surface of the mould. Observe a distance of 0.5 m! |
| | | 5. Work place | <ul style="list-style-type: none"> - Ensure optimum ventilation at the work place - Protective measures for employees - Dust-free surroundings |
| | | 6. After work | <ul style="list-style-type: none"> - Close containers tightly after work - Return containers to their proper storage space - Clean machines, equipment and tools |