Innovative and Sustainable Reactive Resin Specialties

New Chemistry
for Sustainable
Composite Components

Composites

Head office of BÜFA Holding, Oldenburg

BÜFA supports floral meadow project for biodiversity

Sustainability in the vehicle fleet too

BÜFA Minis, our daycare centre for children

BÜFA – New Chemistry for a Future-oriented World

The BÜFA Group has been awarded the gold medal by EcoVadis, an independent sustainability rating body.
EcoVadis evaluates the company guidelines, measures taken and public reporting in the four core areas of environment, labour and human rights, ethics and sustainable procurement.

Established in 1883, the BÜFA Group has since evolved into an independent, medium-sized chemical company that is active today around the world. The name BÜFA stands for more than just the names of its founders Ludwig Büsing and Friedrich Fasch. Rather, it also points to a combining of digitalisation, innovation and sustainability in the chemical industry.

The company´s historical forms the basis for our future-oriented outlook. Today we are proud not only to honour tradition but also to pioneer the innovative paths of a ‘new chemistry’.

Sustainability is an integral part of the activities of the BÜFA Group. It is committed to responsibility with regard to economic, ecological and social aspects. The BÜFA Group is guided by the United Nations Sustainable Development Goals and has been awarded the Gold status from EcoVadis. The management systems at the production sites are also certified in accordance to ISO 9001 and ISO 14001. This is confirmed by external certification authorities part of the quality and environmental management systems. Since 2021 BÜFA has achieved climate neutrality at all german sites through its internal efforts and compensation programs. This is a milestone that shows that tradition and a focus towards the the future can be combined together in order to create a sustainable basis for future generations.

Research and development laboratory

BÜFA Composites, Rastede

BÜFA Composite Systems: Quality Meets Sustainability

Within the BÜFA Group, BÜFA Composite Systems focuses on developing and manufacturing polyester resin specialties.

Our mission is clearly defined: We want to offer polyester resin products of the highest quality that meet today's market demands while being sustainable. Sustainability is a key concern for us. Over 20 years ago we committed ourselves to protect people and the environment. Thanks to sustainable selection of raw materials and our environmentally friendly technologies, we continue to broaden our portfolio. Our focus is thus for example on advanced fire prevention systems with the production of fire-resistant, fibre reinforced composite components and polyester resin solutions with reduced styrene content. Measures of this kind not only contribute to increase the quality of our products and their safety for people and the environment, they also help significantly to reduce our ecological footprint.

BÜFA Composites is a supplier to various sustainable branches such as public transport by road and rail and windpower generation. Our goal is to offer polyester resin specialties that enable manufacturers of fibre composite materials to design and manufacture sustainable composite components.

Every one of our products reflects our many years of experience and our commitment to quality and sustainability. We underpin our technical knowledge and experience in this field with our many certificates and awards and thanks to our close collaboration with leading research bodies.
‘Our clear focus for the future: a sustainable BÜFA portfolio sold via BÜFA’s own distributions and sales partners. It is our view that sustainability and success go together. Our clear vision and our environmental management strive towards a greener, more sustainable future for everyone,’ says Lothar Kempf, managing director of BÜFA Composite Systems.

Working together, orientated to the customer

Photovoltaic system on flat roof of warehouse

BÜFA`s own canteen

Designing the Future:

Our Path to a Sustainable Product Range at BÜFA Composites in Focus

In a world where sustainability is no longer an option, but a necessity. We are setting ourselves the ambitious goal of continuously developing our product range and creating a portfolio that is entirely sustainable and future-ready.

‘In our BÜFA production facilities we are already developing and producing sustainable products with optimised processes and resource use. Thanks to our suppliers, we are increasing the use of sustainable materials to improve our product portfolio and provide our customers with high-quality, environmentally friendly products.’

Peter Kornas | Director Product Development and Technical Application

Lightweight engineering combined with fire retardancy

Composites Compared: why GRP is the Better Alternative

Glass fibre reinforced plastic (GRP) offers not only technical and functional benefits but also a number of sustainable aspects that make it an environmentally friendly choice in many applications:

Strengths:
Per kilogram, a glass fibre composite is mechanically far more resilient than steel. This is because the fibres bear the load while the resins distribute the weight. The result is a material that withstands immense loads.

Lightweight:
At one-fifth the weight of steel, GRP offers significant advantages in transportation and installation.
Its light weight makes it easier to handle and install. The low weight of GRP can also result in substantial energy savings in applications where weight is an issue, such as transportation systems.

Resource efficiency:
Due to its structure, GRP can often be made thinner and lighter than other materials, reducing the amount of material and energy consumption during production and transportation.
Long life and durability: GRP is corrosion, rust and chemical resistant. This means that it lasts longer and requires less maintenance, particularly in harsh environments such as maritime or chemical applications.

Flexibility:
GRP can be individually adapted, providing designers with a high level of design freedom. It can be used without problems in complex shapes and structures.

Sustainability:
Compared with other composite materials, GRP has the lowest CO_2 footprint in the entire value chain. This makes it an environmentally friendly choice in respect of climate change.

Recyclability:
While the recycling of GRP can be challenging, progress is being made in developing recycling methods for composite materials. There are currently a number of research projects concerned with the recycling of composites. These involve the studying and advancing of a diverse range of technologies such as pyrolysis and solvolysis.
In the co-processing method of recycling, the GRP component serves both as a raw material and as a source of energy that can replace natural mineral resources and fossil fuels.
Bio-based reinforcement fibres: the anticipated use of biobased natural fibres is also a good option for the future.

To sum up, fibre-reinforced composites offer a combination of strength, lightweight, resilience, design freedom, durability and sustainability that make it a top choice for many applications. Whether in the windpower, automotive, maritime, construction or railway segment, glass fibre reinforced plastic offers advantages that only few other materials can offer.

Simple manufacturing, example of mould tooling

Rapid curing, example of foaming resin

Lightweight

For Processing: Sustainability Meets Efficiency

Thanks to its many benefits for processing, polyester resins represent a potent alternative in the composite materials sector – and for good reasons.

Cost-effective:
Low production and tool costs.

Easy to handle:
Less specialist training and equipment required.

Fast curing:
Shorter production times and energy savings.

High-strength:
Long-lasting products mean less waste.

Overall, the unique properties of polyester resin systems contribute to reducing the ecological footprint in the production of composite components, so making it a ‘green’ choice for many application areas.

Why Switch Now?

Changing over to sustainable products in the composite materials industry has both environmental and economic advantages. Here are some reasons and customer benefits why it makes sense to change over to sustainable products:

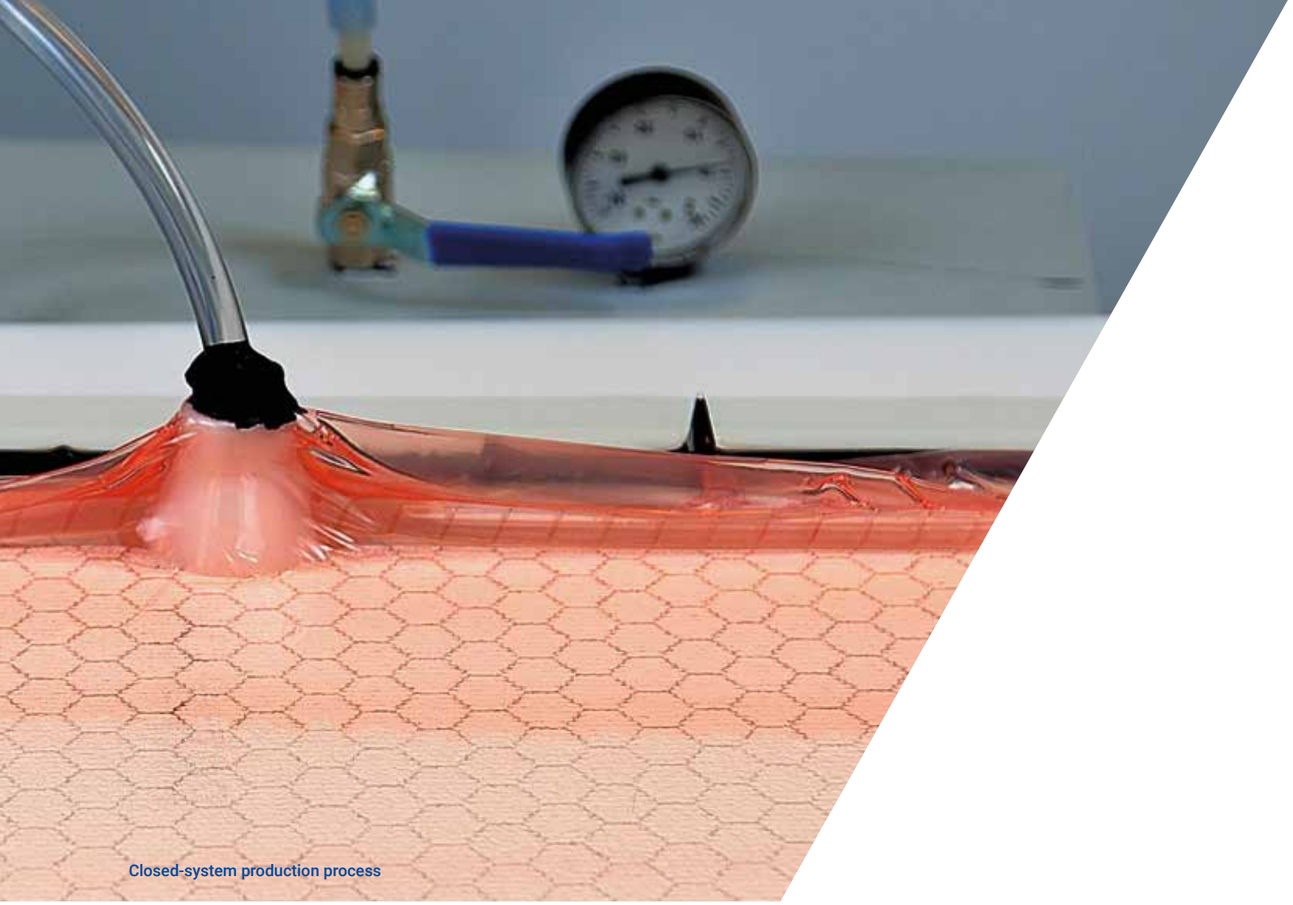
Compliance with environmental regulations:
Particularly in Europe and Germany, environmental regulations are becoming increasingly strict. By using sustainable materials, manufacturer and processor can both ensure that they meet these standards or indeed exceed them.

Market differentiation and an improved image:
Consumers and clients are placing increasing value on sustainability. Companies that use and manufacture sustainable composite components can position themselves as pioneers in their branches.

Access to new markets:
Certain markets and industries will have specific requirements for sustainability and environmental friendliness. Companies that produce and process sustainable composite components and thus are already familiar with handling them can access these markets more easily.

All in all, changing over to sustainable products offers not only environmental benefits but can also help companies to stay competitive and to prepare for future market conditions.

Roof of a camper van: faster, easy demoulding



Closed-system production process

Environmentally Friendly Labelling: Introduction of the ‘BÜFA®-future’ Label

Recently the BÜFA Group created the in-house ecological quality label ‘BÜFA®-future’.
‘With this label, we would like to make it clear to you as the customer that we are emphatically committed to creating a more liveable future. Our products are not intended only to satisfy your current needs but also to be in harmony with a responsible, sustainable and future-orientated form of product development,’ says Felix Thalmann, CEO of the BÜFA Group.

This label is intended to provide a clear indication of sustainable products.
In the composites field, for example, these products help reduce VOC emissions, use raw materials from biological sources or use recycled waste streams to minimize environmental impact. Reduced material consumption or improved safety aspects can also be benefits.

What does ‘BÜFA®-future’ Represent at BÜFA Composite Systems?

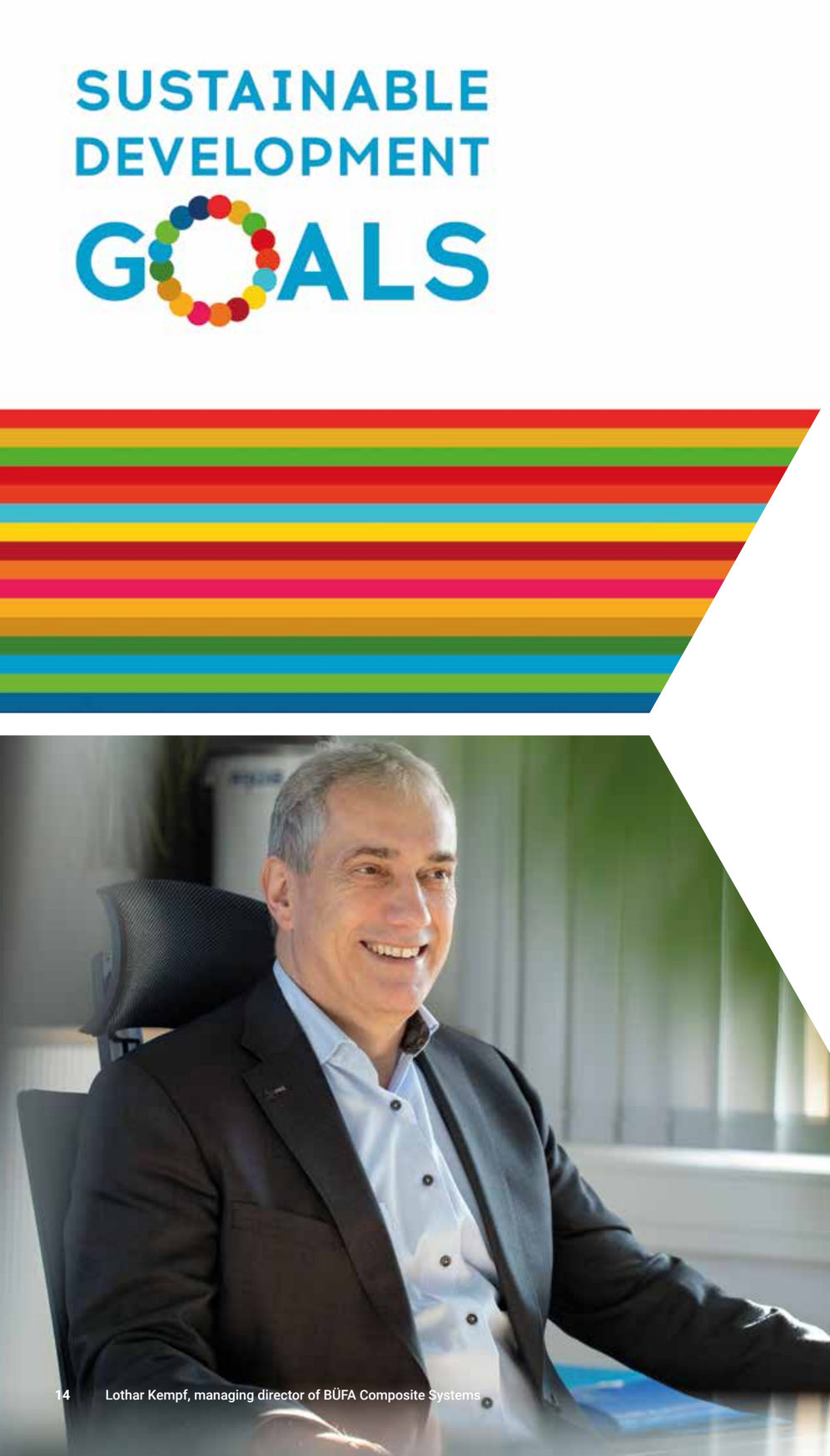
At BÜFA Composite Systems the ‘BÜFA®-future’ label stands for future-orientated visions in the composite materials industry. The word ‘future’ in the name indicates that our commitment is focused on innovation, progress and sustainability. Our products and solutions which carry this label are designed in such a way as to have a positive effect on future generations.

Over the past decades, BÜFA Composite Systems has already developed a series of sustainable products and systems. The innovations in our portfolio not only extend to low-styrene and styrene-free resins and products based on recycled PET material and resins with increased bio content, but also include products with sustainable added values that we designate as unique selling propositions (USPs). These USPs are manifested in the highest quality of our products, the promotion of lightweight design and in ensuring safety, particularly in the areas of fire protection and electrical discharge capability.

The logo with the ‘Play’ button symbolises our focus on innovation and sustainable development. Just as pressing a Play button sets something in motion, our logo likewise signals the dynamic drive for pioneering innovations and a sustainability that is future-ready.

‘It should encourage customers to choose environmentally friendly products and to reduce their ecological footprint,’ explains Lothar Kempf, managing director of BÜFA Composite Systems.

With BÜFA®-future we would like to explore ways with you for creating a sustainable and promising future.



Lothar Kempf, managing director of BÜFA Composite Systems

BÜFA in Harmony with the UN Sustainable Development Goals

Focusing on the Sustainable Development Goals (SDGs) of the United Nations, we design products that are beneficial to people, the environment and the economy in equal measure.

Our company integrates the SDGs actively into our philosophy and our actions. Placing the emphasis on people, environment, innovation and economy, we are committing ourselves for a sustainable future. Our portfolio is a sign for positive change – towards a world of responsibility and sustainability – for today and for a future fit for our grandchildren.

SDG 3
Good health and well-being:
Our products support applications that protect people and the environment. The BÜFA®-future line, for example, contains no CMR 1 substances. In addition, the use of products with little or no styrene and the use of closed processes both result in reduced impact on the workplace from emissions. The electrically conductive materials of the BÜFA®-Conductive Line help to improve work safety, while the high-quality fire protection in the BÜFA®-FireFox systems allows safe components to be manufactured to the highest quality standard.

SDG 8
Decent work and economic growth:
We want to secure the long-term success of our company, in harmony with environmental and social responsibility. We create secure jobs and support economic development throughout the value chain.

SDG 9
Industry, innovation and infrastructure:
We develop innovative products to enable ourselves and our customers to break new ground. Our portfolio supports sustainable infrastructures and forward-looking technologies. Our products are used in a diversity of branches such as wind power and public transport.

SDG 12
Responsible consumption and production:
We are committed to resource efficiency and minimum waste in order to support sustainable consumption and production. We follow the entire life cycle of our products, from the acquisition of raw materials through manufacturing to the use of the products by the customer.

SDG 13
Climate action:
Our focus is on products and technologies that reduce emissions to fight climate change.

Eco_Team Race Germany with sustainable ‘ECO_Optimists’

Entry into Sustainable Sailing

BÜFA Composites and KHULULA – Together for a Greener Future

Success stories make the difference between stagnation and progress. At a time in which environmental responsibility and innovation both play increasingly major roles, BÜFA Composite Systems, as a specialist supplier of polyester resins, and KHULULA, as a trailblazer for sustainable progress in sailing, have joined forces.

In early 2022 KHULULA presented the ‘Eco_Optimist’ – a highly remarkable sailing boat and the first of its kind, built predominantly from renewable and recycled materials.

The visionaries behind this environmentally friendly optimist are Simon Licht and Holger Ambroselli of KHULULA. Their idea led to the formation of the Eco_ Team Race Germany, the world’s first sustainable, transparently documented sports series for children. The long periods of operation and the intensity of use during these races has emphasized the real performance of the boat.

BÜFA Composites provided an biobased resin, flax as a natural fibre reinforcement and a strong sandwich core in recycled PET, which formed the basis for the project. Simon Licht of KHULULA commended the decisive support provided by BÜFA, which formed the basis for the environmentally friendly boat and supported KHULULA’s efforts towards sustainable innovation in sailing.


‘ECO_Optimists’


Flax as a natural fibre reinforcement

Implementation of the Eco_Optimist was handled professionally by Tobias Schadewaldt and his team from Jade Yachting. The good, straightforward fabrication properties of the materials supplied by BÜFA Composites in the closed-mould process were confirmed, which contributed to the efficient and precise manufacturing of the boats. Thanks to production in Germany using accessory parts from Europe, lengthy sea transport could be avoided.

The result is an environmentally friendly ‘Opti’ class dinghy in fibre composites with hydrolysis and UV resistance made with about 90 % renewable raw materials and recycled materials. BÜFA provided support not only with its products but also during the production phase since the first prototype was produced in the application technology department of BÜFA Composites. The result shows that sustainability and performance can go together.
The integration of bio resins, natural fibre reinforcements and recycled PET sandwich cores as sustainable individual components or as part of an integrated sustainable system opens up exciting prospects for the future. These solutions could set new benchmarks for environmental friendliness and efficiency in many branches. The future looks promising as more and more companies are seeking sustainable solutions for making their products and processes more environmentally friendly.

KHULULA

www.khulula.eco

A real winning team!

The Eco_Optimist consists of up to 90 % renewable raw materials and recycled materials. The jury was impressed by the use of sustainable, resource-saving materials and the short supply paths resulting from production of the Eco_Optimist in Germany. The CO_2 footprint of this sustainable sports item could thus be significantly reduced.

Working together

BÜFA®-future: our Vision for Tomorrow

Welcome to the World of Sustainable Products from BÜFA Composite Systems.

Our ‘future’ label products that meet the highest standards in terms of environmental friendliness and sustainability. Every product that carries this label has been carefully checked and satisfies at least one of the following sustainability criteria:

Reduced-styrene or styrene-free Products:
For a production process with reduced emissions and a healthier and more environmentally friendly end product.

Organically based Raw Materials:
Products that originate from renewable sources and preserve our natural resources.

Products with Recycled Raw Materials:
There are already resin solutions containing up to 25 % recycled PET material from post-consumer waste (PET bottles).

Fire Protection – the BÜFA®-FireFox System:
Safety and sustainability go hand in hand. Fire retardant products with this mark offer the highest fire protection. A premium system for the production of fire-retardant fiber-reinforced composite components in closed processes that offers a wide range of possible combinations. The focus here is on protection of people and the environment.

Class A Surface Quality:
A quality property that satisfies the highest standards for surfaces. This Class A resin is processed in a closed mould system, resulting in fewer emissions from the processing. High thermal dimensional stability ensures a long life. Additional print barriers such as a barriercoat or skincoat are not necessary. This saves material and resources, while also reducing rejection rates and reworking to a minimum.

BÜFA®-Foaming Resin:
GRP foam resin components (bulk density approx. 1.1 g/cm^3) offer a weight reduction of up to 45 % in comparison to a standard composite component (bulk density approx. 1.6 g/cm^3) – to say nothing of the comparison to steel (bulk density approx. 7.8 g/cm^3). Use of foam resin in transport applications, for example, results in fuel savings and a reduction in CO_2 emissions. Our foam resins can also be provided with fire protection.

Conductive Line:
These products are conductive, so protecting people and environment. The use of BÜFA®-Conductive products in mould tooling reduces dust adhesion, which in turn reduces the reworking required (cleaning). By reducing the demoulding forces, the component is easier to remove. This results in a longer working life for the component moulds. Work safety is also significantly improved, since electrical charges that would otherwise cause uncontrolled flash discharges (e.g. during demoulding) are safely discharged through a simple earthing.

BÜFA®-Resins

BÜFA future

Product name	Item no.	Styrene content	NaWaRo content	Recycled content	Sustain-ability aspect	Added value (USP)	Industries									Comments
							Building / Construction	Wind Energy	Transportation	Railway	Cruiser / Marine	Swimming Pool	Sanitary	Tanks & pipes	Tooling	
BÜFA®-Resin UP 0113 ACR	7000113	< 25 %			reduced styrene							x	x	x		Pre-accelerated, low viscosity, thixotropic and filled laminating resin of medium reactivity. Suitable for hand lamination and fibre spray processes
BÜFA®-Resin UP 0119 ACR	7000119	< 25 %		> 5 %	reduced styrene, contains recycled materials							x	x			Pre-accelerated, low viscosity, thixotropic and filled laminating resin of medium reactivity. Suitable for hand lamination and fibre spray processes
BÜFA®-Resin VE 0910	7000910					Class A			x		x		x		x	Thixotropic, pre-accelerated vinyl ester urethane resin based on bisphenol A epoxy
BÜFA®-ECO-Resin UP 2020 HLU styrene free	7002020	0 %			styrene-free			x			x		x			Styrene-free, thixotropic, medium reactive, low viscosity laminating resin
BÜFA®-Resin VE 6520 RTM	7006520					Class A surface quality; closed-system processes			x							Filled and pre-accelerated resin system that cures without shrinkage
BÜFA®-Resin UP 6601 RTM	7006601	< 25 %			reduced styrene	Closed-system processes			x							Pre-accelerated, tinted UP resin
BÜFA®-ECO-Resin UP 6889 biobased	7006889		> 5 %		70 % by weight organic resin from renewable sources			x	x		x					Pre-accelerated, non-thixotropic polyester resin based on sustainable raw materials
BÜFA®-Resin VE 7100 Tooling	7007100					Class A surface quality		x	x	x	x	x			x	Filled and pre-accelerated resin system that cures without shrinkage
BÜFA®-Resin UP 7330 MC Foaming	7007330					BÜFA®-Foaming Resin; lightweight			x							Thixotropic polyester resin, that can be foamed with special blowing agents

BÜFA future

Product name	Item no.	Styrene content	Sustain-ability aspect	Added value (USP)	Industries									Comments
					Building / Construction	Wind Energy	Transportation	Railway	Cruiser / Marine	Swimming Pool	Sanitary	Tanks & pipes	Tooling	
BÜFA®-Firestop S 425	7160425			BÜFA®-Fire-Fox System; closed-system processes	x	x		x				x		Unfilled, halogen-free, pre-accelerated, for structural components in the vacuum injection process
BÜFA®-Firestop S 440	7160440			BÜFA®-Fire-Fox System; closed-system processes	x	x		x				x		Pre-accelerated VE infusion resin for structural components using the vacuum injection process
BÜFA®-Firestop S 520	7160520			BÜFA®-Fire-Fox System; closed-system processes		x		x						ATH-filled resin for structural components, pre-accelerated in the RTM process
BÜFA®-Firestop S 570	7160570	< 25 %	reduced styrene		x	x		x						ATH-filled, thixotropic resin for structural components in the hand lamination process, pre-accelerated
BÜFA®-Firestop S 585	7160585			BÜFA®-FireFox System; Class A surface quality; closed-system processes	x		x	x						Filled, pre-accelerated VE-LP resin with good fire retardant properties
BÜFA®-Firestop 8175-W-1	7168175	< 25 %	reduced styrene		x			x						Filled thixotropic resin for structural components for hand lamination processes, pre-accelerated. Can also be used for RTM processes
BÜFA®-Firestop S 910 Foaming Resin	7960910			BÜFA®-FireFox System; BÜFA®-Foaming Resin; lightweight; closed-system processes			x	x						Unfilled foaming resin system with good fire retardant properties using the RTM process
BÜFA®-Conductive-Resin VE 2245	7211003			Conductive								x		Pre-accelerated epoxy bis-A VEU resin, dissolved in styrene. The use of highly efficient conductive additives enables surface resistances of << 10^6 Ω

UP – Unsaturated Polyester Resin
IP – Isophthalic Acid
OP – Ortho-Phthalic Acid

VE – Vinyl Ester
DCPD – Dicyclopentadiene
BPA – Bisphenol A

VEU – Vinyl Ester Urethane
NPG – Neopentyl Glycol
VT - Vinyl Toluene

BÜFA®-Gelcoats

BÜFA future

Product name	Item no.	Styrene content	Sustain-ability aspect	Added value (USP)	Industries									Comments
					Building / Construction	Wind Energy	Transportation	Railway	Cruiser / Marine	Swimming Pool	Sanitary	Tanks / Pipes	Tooling	
BÜFA®-VEU-Conductive Gelcoat black	7220262	< 25 %	reduced styrene	Conductive	x							x		Gelcoat for moulded parts where chemical resistance is required in addition to electrical conductivity. Hand quality
BÜFA®-Conductive Gelcoat black	7220399	< 25 %	reduced styrene	Conductive	x									Gelcoat for moulded parts where basic fire protection is required in addition to electrical conductivity. Hand quality
BÜFA®-ISO-Gelcoat-SV leitfähig kieselgrau	7227500			Conductive	x									Conductive spray gelcoat for moulded parts that need strong weathering properties, as well as electrical conductivity
BÜFA®-Tooling-Conductive-Gelcoat-S-A-black	2040207			Conductive									x	Conductive tooling spray gelcoat suitable for the production of GRP moulds that are exposed to high chemical and thermal stress
NEOGEL® ECO 9373-W-2 white BF-93080-E	6200080	30 %	low-emission						x					Gelcoat for exterior parts, boat building, low-emission

BÜFA®-Bonding Pastes

BÜFA future

Product name	Item no.	Styrene content	NaWaRo content	Sustain-ability aspect	Industries									Comments
					Building / Construction	Wind Energy	Transportation	Railway	Cruiser / Marine	Swimming Pool	Sanitary	Tanks / Pipes	Tooling	
BÜFA®-Bonding Paste 0110	7400110		> 5 %	NaWaRo content > 5 %		x	x	x	x			x		For bonding rotor blades for wind energy plants, boat building, pipe bonding, high dynamic loads across a wide temperature range
BÜFA®-Bonding Paste 0111	7400111		> 5 %	NaWaRo content > 5 %		x	x	x	x			x		Modification 7400110 – but with higher stability after machine processing (higher thixotropy)
BÜFA®-Bonding Paste 0182	7400182		> 5 %	NaWaRo content			x		x					Levelling compound ("liquid laminate")
BÜFA®-Bonding Paste 0015	7400015	<25 %		reduced styrene	x		x		x					Sandwich bonding paste with low density
BÜFA®-Fine Body Filler Spray	7400002	<25 %		reduced styrene			x		x					Repair filler in spray version, spray filler for model making with good sanding properties
BÜFA®-Modelling Compound	7400004	0 %	> 5 %	NaWaRo content > 5 %, styrene-free	x								x	Natural wax compound with fillers. Permanently plastic modelling compound for model and mould making for filling hollows, closing cavities and modelling
FREEFIX® 6470-W-2	6956470	< 25 %		reduced styrene			x		x					Filler and for bonding cured GRP laminates, as long as they are subject to normal requirements
BÜFA®-Bonding Paste 0188	7400188	< 25 %		reduced styrene			x		x					Bonding paste for standard bonding, filling applications (gap filling) up to 10 cm, lightweight construction applications in boat building
BÜFA®-Bonding Paste 0600	7400600	< 25 %		reduced styrene	x				x					Standard bonding paste
BÜFA®-Bonding Paste 0601	7400601	< 25 %		reduced styrene	x				x					Standard bonding paste
BÜFA®-Bonding Paste 0650	7400650	< 25 %		reduced styrene	x				x					Standard bonding paste, impact-modified, good stability after machine processing
BÜFA®-Bonding Paste 0651	7400651	< 25 %		reduced styrene	x				x					Standard bonding paste, impact-modified, good stability after machine processing
BÜFA®-Bonding Paste 0185	7400185	< 25 %		reduced styrene			x		x					Standard bonding paste with very good mechanical properties, good thixotropy
BÜFA®-Bonding Paste 0588	7400588		> 5 %	NaWaRo content > 5 %			x					x		Standard applications; highly reactive; also for thin layers; tack-free curing, fixing applications

Krzysztof Bargiel, director of production and Lothar Kempf, managing director

BÜFA®-Accelerators

BÜFA future

Product name	Item no.	Styrene content	Sustain-ability aspect	Industries									Comments
				Building / Construction	Wind Energy	Transportation	Railway	Cruiser / Marine	Swimming Pool	Sanitary	Tanks / Pipes	Tooling	
BÜFA®-Accelerator polymeric Cobalt 1	7420071		Polymeric cobalt	x	x	x	x	x	x	x	x		Polymeric cobalt, 1 % dissolved in styrene and xylene
BÜFA®-Accelerator polymeric Cobalt 4	7420096	0 %	Polymeric cobalt, styrene-free	x	x	x	x	x	x	x	x		4 % polymeric cobalt
BÜFA®-Accelerator Co 10 BTX-free / NEW	7951222	0 %	BTX-free, styrene-free	x	x	x	x	x	x	x	x		10 % cobalt accelerator without BTX and styrene

BÜFA®-Additives

BÜFA future

Product name	Item no.	Styrene content	Sustain-ability aspect	Added value (USP)	Industries									Comments
					Building / Construction	Wind Energy	Transportation	Railway	Cruiser / Marine	Swimming Pool	Sanitary	Tanks / Pipes	Tooling	
BÜFA®-Additive Repair Solution	7420030		Repair additive				x		x					BÜFA®-Additive Repair Solution is a specially modified paraffin solution, dissolved in styrene and acetone for gelcoat repairing
BÜFA®-Conductive-CNT-Paste-UP	7210001	0 %	stryene-free	Conductive	x							x		BÜFA®-Conductive-CNT-Paste-UP is a masterbatch with 1 % Single Wall Carbon Nanotubes. The resin base is a styrene- and monomer-free unsaturated polyester resin
BÜFA®-Conductive-CNT-Paste-EP	7210002	0 %	styrene-free	Conductive	x							x		BÜFA®-Conductive-CNT-Paste-EP is a master-batch with 1 % Single Wall Carbon Nanotubes. The resin base is a mixture of bisphenol-A and bisphenol-F epoxy resin
BÜFA®-Conductive-Resin-Additive UP 1412	7211412			Conductive								x		BÜFA®-Conductive-Resin-Additive UP 1412 is a concentrate with 0.2 % Single Wall Carbon Nanotubes in bisphenol A resin. The concentrate is not pre-accelerated
BÜFA®-Conductive-Resin-Additive UP 1433	7211433	< 25 %	reduced styrene	Conductive	x									BÜFA®-Conductive-Resin-Additive UP 1433 is a concentrate with 0.3 % Single Wall Carbon Nanotubes in bisphenol A resin. The concentrate is not pre-accelerated

On your Side – Everywhere!

BÜFA Specialties Export

BÜFA Composite Systems GmbH & Co. KG
Hohe Looge 2-8
26180 Rastede | GERMANY

Sylvia Jacob (Export)
Phone +49 (0) 4402 975-334
sylvia.jacob@buefa.de
www.buefa-composites.com

BÜFA Distributions

Austria | Slovakia | Hungary | Slovenia | Croatia | Bosnia and Herzegovina | Serbia | Kosovo | Montenegro

BÜFA Composites Austria GmbH
Wallgasse 21
1060 Vienna | AUSTRIA

Austria
Christian Kubalek
Phone +43 (0) 597 4712219
customerservice@buefa.at
www.buefa-composites.at

Slovakia | Hungary | Slovenia
Eike Siegert
Phone +43 (0) 664 2849471
customerservice@buefa.at
www.buefa-composites.at

Croatia | Bosnia and Herzegovina | Serbia | Kosovo | Montenegro
Damir Vinković
Phone +385 91 6181147
customerservice@buefa.at
www.buefa-composites.at

Baltic States

BÜFA Composites Baltic OÜ
Kõrtsi tee 9
75306 Lehmja | ESTONIA

Kait Vahter
Phone +372 53 413545
office@buefa.ee
www.buefa-composites.ee

Benelux | Northern France

BÜFA Composites Benelux B.V.
Dragonder 1b
5554 GM Valkenswaard
NETHERLANDS

Benelux
Martijn Moonen
Phone +31 68 2847069
customerservice@buefa.nl
www.buefa-composites.nl

Northern France
Céderic Flusu
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Finland | Sweden | Norway

BÜFA Composites Nordics
c/o Satakerta Rödl & Partner Oy
Kalevankatu 6, 3. krs
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Finland
Sami Partio
Phone +358 (0) 50 5367733
sami.partio@buefa.de
www.buefa-composites.fi

Sweden | Norway
Olle Johnsson
Phone +46 70 3074432
olle.johnsson@buefa.de
www.buefa-composites.se

Germany | Switzerland

BÜFA Composite Systems GmbH & Co. KG
Hohe Looge 2-8
26180 Rastede | GERMANY

Uwe Eden
Phone +49 (0) 4402 975-306
uwe.eden@buefa.de
www.buefa-composites.de

Poland

BÜFA Composites Poland Sp. z o.o.
ul. Starogardzka 42-44
83-010 Straszyn | POLAND

Tomasz Zakrzewski
Phone +48 691 997 999
tomasz.zakrzewski@buefa.pl
www.buefa-composites.pl

Spain

BÜFA Composites Spain S. L.
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Poligono Industrial Can Roqueta
08202 Sabadell (Barcelona) | SPAIN

Jordi Geli
Phone +34 (0) 607 768971
jordi.geli@buefa.es
www.buefa-composites.es

United Kingdom | Ireland

BUFA Composites UK Ltd.
BUFA House
Factory Lane, Brantham
Manningtree, Essex
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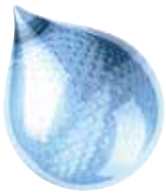

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