YOUR BENEFITS

- System-certified solution
- Extremely resistant and highly flexible
- Wide range of applications
- Material and weight savings thanks to lightweight components
- Pre-accelerated and ready to use
- Certified fire resistance
- Continuous quality control in accordance to ISO-Standards
- Low toxicity and low smoke emission
- Custom formulations developed to your specification on request
- Gelcoat H07 available in all RAL colours

Our innovative fire protection systems are available in a range of formulations for all the key processing methods: hand lay-up, spray-up, vacuum infusion and the injection processes RTM and RTM Light. The matching high-quality gelcoats protect the laminate against chemical and mechanical stress as well as against weathering, UV radiation and moisture.

Our fire protection systems can be used in a wide variety of fields. Alongside their many applications in construction, they are particularly well suited for use in the marine industry, the energy sector (wind power in particular) and, of course, the many areas of transport such as rail vehicles, mountain railways and buses.

THE RIGHT GLASS MAKES THE DIFFERENCE – AND WE SUPPLY IT TOGETHER WITH YOUR RESIN!

We keep a broad range of glass fibre reinforcements in stock, including chopped strand mats, woven fabrics, non-crimp fabrics and combinations of these, so we can supply the right reinforcement together with the matching resin. On request, we also develop customised solutions in cooperation with our manufacturing partners to meet your specific requirements.

Mühlmeier GmbH & Co. KG

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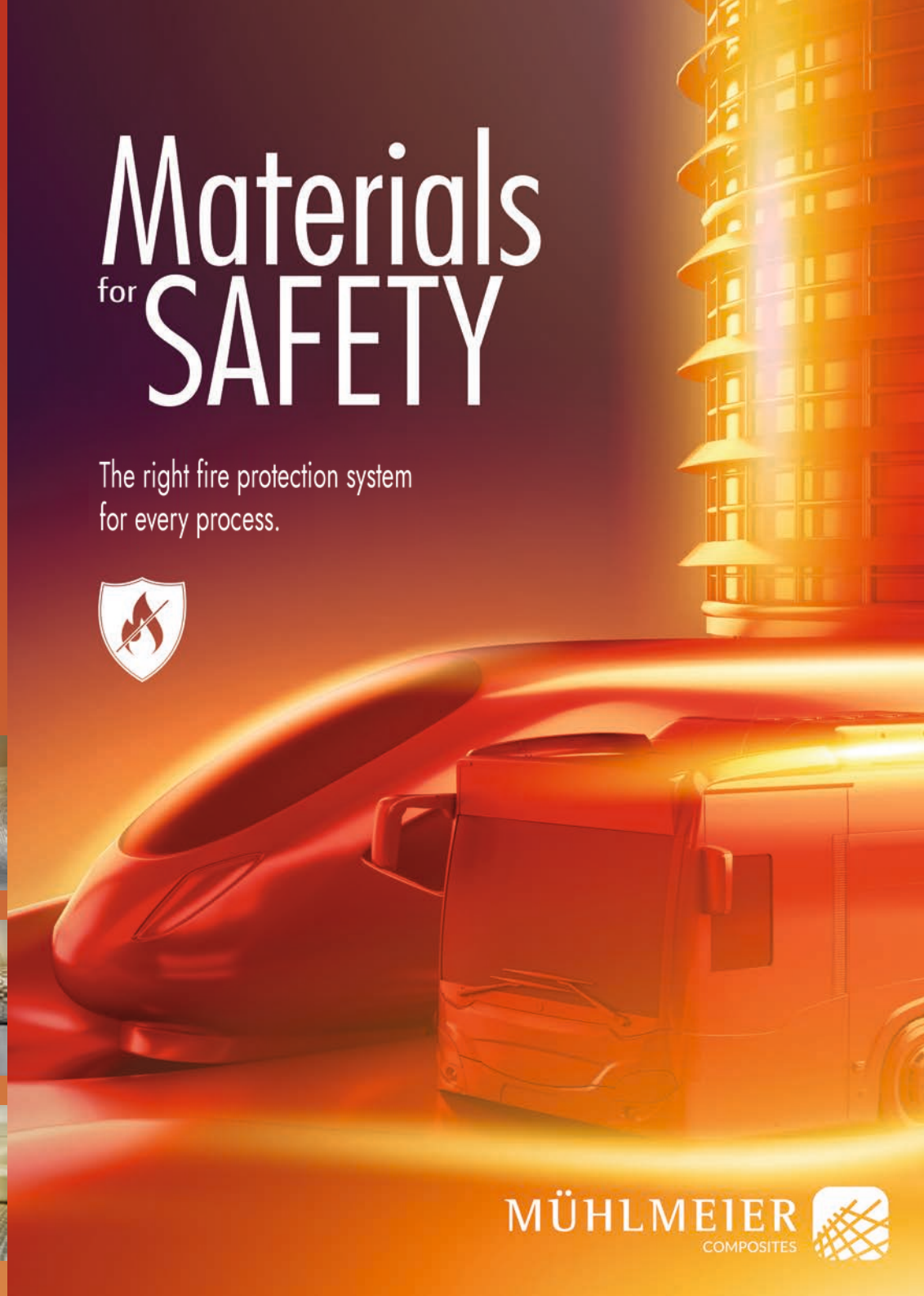
MÜHLMEIER COMPOSITES

Materials for SAFETY

The right fire protection system for every process.



MÜHLMEIER COMPOSITES

	PRODUCT NAME	FIRECARE fire protection system 1*		FIRECARE fire protection system 2*		FIRECARE fire protection system 3*				
		RESIN R930A	Gelcoat H07 series	RESIN R946A	Gelcoat H07 series	RESIN R921A0000G15	Gelcoat H07 series	RESIN R919A0000G20	RESIN R921A0000G15	RESIN R930A
SYSTEM PROPERTIES	RESIN BASE	UP		UP		UP		UP	UP	UP
	HALOGEN-FREE	✓		✓		✓		✓	✓	✓
	FLAME RETARDANT	✓		✓		✓		✓	✓	✓
	PRE-ACCELERATED	✓		✓		✓		✓	✓	✓
	THIXOTROPIC	✓		✓		✓		✓	✓	✓
	CURING	1.0% MEKP50 + 0.5% HTPR83	2% MEKP	1.0% MEKP50 + 0.5% HTPR83	2% MEKP	1.5% MEKP	2% MEKP	1.5% MEKP	1.5% MEKP	1.0% MEKP50 + 0.5% HTPR83
	GEL TIME (25°C) AVERAGE	6 - 10 min	13 min	6 - 10 min	13 min	13 - 35 min	13 min	15 - 30 min	13 - 35 min	6 - 10 min
	VISCOSITY (25°C) AVERAGE	1100 - 1600 mPas	5500 mPas Spray 13000 mPas Brush	1100 - 1600 mPas	5500 mPas Spray 13000 mPas Brush	800 - 1100 mPas	5500 mPas Spray 13000 mPas Brush	800 - 1100 mPas	800 - 1100 mPas	1100 - 1600 mPas
	VOLATILE CONTENT	< 15%		< 15%		< 30%		< 30%	< 30%	< 15%
MECHANICAL PROPERTIES	TENSILE STRENGTH	124 MPa				146 MPa			146 MPa	124 MPa
	E-MODULUS	11 GPa				10 GPa			10 GPa	11 GPa
	ELONGATION AT BREAK	2%				2.40%			2.40%	2%
	IMPACT STRENGTH (CHARPY)	86 kJ/m²				86 kJ/m²			86 kJ/m²	86 kJ/m²
FIRE PROTECTION CERTIFICATION	EN 45545-2	HL3:R1, R6, R7							HL1:R1, HL2:R7	
	EN 13501-1			B-s2,d0		C-s2,d0		C-s2,d0		
	IMO 2010 FTP									✓
APPLICATIONS	PLANT ENGINEERING	✓		✓		✓		✓	✓	✓
	CONSTRUCTION			✓		✓		✓		✓
	ENERGY (WIND ETC.)	✓		✓		✓		✓	✓	✓
	MARINE INDUSTRY									✓
	TRANSPORT	✓							✓	
PROCESSING METHODS	HAND LAY-UP	✓		✓		✓		✓	✓	✓
	SPRAY-UP					✓		✓	✓	
	RTM					✓		✓	✓	
RECOMMENDED FIBRE REINFORCEMENT	CHOPPED STRAND MAT	✓		✓		✓		✓	✓	✓
	WOVEN ROVING	✓		✓		✓		✓	✓	✓
	MULTIAXIAL FABRIC	✓		✓		✓		✓	✓	✓
	SPRAY ROVING					✓		✓	✓	
	GLASS VEIL	✓		✓		✓		✓	✓	✓

*For further information, please contact our technical support team directly.