



SIMONA

SIMONA® PP/PC-GF-FR **LIGHT. SAFE. RECYCLABLE.** **DESIGNED FOR SCALE.**

The transition to electromobility is associated with multifaceted conflicts of objectives, particularly the need to balance maximum safety against minimum weight, while ensuring both high-volume manufacturability and compliance with sustainability imperatives. Battery systems and charging infrastructure require materials that can withstand high mechanical loads and stringent fire safety requirements, while also being suitable for efficient and reproducible processing. It is precisely here that many established materials reach their limits, underscoring the need for material solutions that resolve these conflicting objectives while providing the basis for sound, future-proof decision-making with regard to selection processes.

OUR SOLUTION MAKES ALL THE DIFFERENCE

This is exactly where SIMONA® PP/PC-GF-FR comes to the fore. Our sheet products are designed to deliver solutions that can be implemented at an industrial level, while meeting the exacting standards of the electromobility sector. The decisive difference lies in our unique combination of material, process, and application expertise: SIMONA is recognized as one of the world's leading suppliers

capable of extruding glass-fiber-reinforced and flame-retardant thermoplastics as sheet products – configurable, reproducible, and engineered with the specific application in mind. This results in production-ready materials that reliably combine mechanical performance, lightweight construction, and recyclability, thereby creating a resilient basis for long-term e-mobility concepts.



APPLICATIONS

- Structural vehicle components, e.g., battery housings, battery covers
- Functional protective components and battery elements, e.g., end plates, separator modules, carriers
- Enclosures and structural components relating to charging infrastructure, such as stationary energy storage systems, distribution boxes

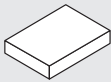
KEY BENEFITS

- **Lightweighting with a strong focus on safety**
Exceptional mechanical performance with low weight and a high level of fire protection – for efficient and safe e-mobility applications
- **Configurable – not standard**
Glass fiber content, flame retardancy, dimensions, and thicknesses – precisely tailored to the component, process, and application
- **Production-ready from the outset**
Process-stable sheet extrusion with reproducible quality – designed for scalable series production
- **Processing reliability**
High degree of flatness, dimensional stability, and low shrinkage – for reliable thermoforming and precise CNC machining
- **Future-proof choice of materials**
Thermoplastic recyclability, optionally with up to 30% internal regrind, supporting ESG and CO₂ targets

APPLICATION-DRIVEN DESIGN.
SERIES-READY ENGINEERING.

SIMONA is your trusted partner for thermoplastic sheet solutions tailored to e-mobility applications. From advanced sheet extrusion and application-driven material selection to technical advisory and development support, we accompany projects from initial concept to series production.

Product range

Extruded sheets		
	Materials	SIMONA® PP or SIMONA® PC
	Widths	up to 2,000 mm
	Thicknesses	1–8 mm (other thicknesses on request)
	Lengths	individual
	Glass fiber content	selectable
	Flame protection	optional (UL 94 V-0)
	Regrind content	selectable (up to 30% internal regrind)



MATERIAL SOLUTIONS AND APPLICATION REQUIREMENTS

Criterion	SIMONA® PP/PC-GF-FR	Metals	Thermosets / fiber composites	Standard thermoplastics
Weight	low	high	medium	low
Flame protection	high	high	high	limited
Recyclability	yes	yes	no	yes
Series production capability	high	high	limited	high
Processing flexibility	medium	limited	limited	high

SIMONA AG
Teichweg 16
55606 Kirn
Germany

Phone +49 (0) 6752 14-0
Fax +49 (0) 6752 14-211
mobility@simona-group.com
www.simona.de



Please also visit our website
for further information and
direct contact with our experts.