TechnoFin Line

Quality at a low price

TechnoFin: Even large Volumes available at short Notice
TechnoFin compounds with variable flow behaviour, good workability, possess good damping characteristics, high rigidity and very good abrasion behaviour.

Product Segments
The TechnoFin line consists of non-reinforced, glass fibre reinforced, talc reinforced, mineral reinforced, conductive, impact strength modified and flame retardant compounds.

A large number of TechnoFin compounds are released and currently applied by the automotive industry (TL, DBL, QK etc.). Further information is available upon request.
Additional modifications are available upon request, e.g. colour batches. Anti-static properties, UV stabilisation, nucleation, scratch resistance, optimised emission in addition to the standard properties of TechnoFin products as shown in the following tables.



TechnoFin
Unfilled and magnetite filled

			1355	4004	MA 60	MA 80
Property	**Test method/conditions**	**Unit**	**unfilled**	**unfilled**	**magnetite filled**	**magnetite filled**
Density	ISO 1183	g/cm³	0.90	0.90	2.5	3.1
MVR	ISO 1133	cm³/10 min	8	4	-	-
Moisture residue	Infrared 105 °C, 15 min	%	<0.10	<0.10	<0.10	<0.10
Ash content	ISO 3451 (625 °C)	%	<1	<1	60	80
Charpy impact strength, notched	ISO 179 leA (23 °C)	kJ/m²	>5	>3.5	-	-
Tensile modulus	ISO 527-1	MPa	1200	1150	-	-

TechnoFin
Conductive

			4702	4714		
Property	**Test method/conditions**	**Unit**	**PP**	**PP**	**HDPE**	**HDPE**
Density	ISO 1183	g/cm³	1.02	1.02	1.04	1.04
MVR	ISO 1133	cm³/10 min	2	12	4	10
Conductivity *	Internal method based on IEC 93	Ω* cm	<10³	<10³	<10³	<10³
Charpy impact strength, notched	ISO 179 leA (23 °C)	kJ/m²	>18	>18	>12	>12
Tensile modulus	ISO 527-1	MPa	1500	1500	1400	1300

* The figures for conductivity are based on measurements of plaques produced in our laboratory. The conductivity in the final product may vary depending on the processing method used. We recommend gentle, low friction processing.

We also offer conductive compounds based on polystyrene in addition to the above polyolefins. Data sheets as well as safety data sheets are available upon request.

TechnoFin
Glass fibre reinforced

			GF 20	GF 30	GF30	GF 40
Property	**Test method/conditions**	**Unit**	**Chemically coupled**	**Chemically coupled**	**Chemically coupled**	**Chemically coupled**
Density	ISO 1183	g/cm³	1.06	1.12	1.12	1.16
MVR	ISO 1133	cm³/10 min	8	4	22	8
Moisture residue	Infrared 105 °C, 15 min	%	<0.10	<0.10	<0.10	<0.10
Ash content	ISO 3451 (625 °C)	%	20	30	30	40
Charpy impact strength, notched	ISO 179 leA (23 °C)	kJ/m²	>5	>3.5	>3.5	>2.5
Tensile modulus	ISO 527-1	MPa	3500	5200	5200	6000

TechnoFin
Talcum reinforced

			TV 10	TV 20	TV 30	TV 40
Property	**Test method/conditions**	**Unit**				
Density	ISO 1183	g/cm³	1.00	1.05	1.15	1.25
MVR	ISO 1133	cm³/10 min	8	8	8	8
Moisture residue	Infrared 105 °C, 15 min	%	<0.10	<0.10	<0.10	<0.10
Ash content	ISO 3451 (625 °C)	%	10	20	30	40
Charpy impact strength, notched	ISO 179 leA (23 °C)	kJ/m²	>4.5	>2.5	>2	>1.5
Tensile modulus	ISO 527-1	MPa	1700	2100	3200	3600

Typical Applications:
TechnoFin compounds are used in the following areas:

- Mechanical engineering and tool-building:gears, casing, impact resistant housing components, glass fibre reinforced types for large surface, stiff housing components ...
- Electro-technology: coil shells, housings for electrical appliances, cable plugs and couplers ...
- Automotive: applications by all leading OEMs for the interior, e.g. seat and boot panelling; engine compartment, e.g. filter housing, battery housing, ventilation fans ...
- Furniture industry: strike plates, furniture hinges, castors edge protection ...
- Household appliances: Kitchen appliances, vacuum cleaner housings ...

Pre-drying:
We recommend to pre-dry reinforced TechnoFin compounds at 60 to 80 °C for approx. 2 to 4 hours in order to obtain mechanically and visually flawless injection moulded parts. The drying period must be extended accordingly when using open packaging units or ground material. We recommend to use an air-dryer for this purpose.

Processing Temperatures

Product	**Non-reinforced**	**Reinforced**	**Conductive**	**Impact resistance modified**	**Flame retardant**
PP	210 - 270 °C	220 - 270 °C	220 - 270 °C	220 - 270 °C	200 - 250 °C
HDPE	200 - 250 °C	210 - 250 °C	230 - 270 °C	220 - 270 °C	190 - 250 °C

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Product	**Non-reinforced**	**Reinforced**	**Conductive**	**Impact resistance modified**	**Flame retardant**
PP	20 - 80 °C	30 - 90 °C	30 - 90 °C	20 - 60 °C	30 - 80 °C
HDPE	20 - 80 °C	30 - 90 °C	30 - 90 °C	20 - 60 °C	30 - 80 °C