

LOW LOSS COMPOUND

Advanced Driver Assistance Systems (ADAS) are a crucial bridge connecting current vehicles to a future of autonomous transportation. These intelligent systems are increasingly handling driving tasks, which significantly boosts safety for everyone. The rapid innovation in automotive software and smart technology, including advanced sensors and algorithms, is creating the fundamental building blocks for fully autonomous driving, ultimately leading to a safer and more efficient future for all.

Daikin's low loss compound*,

a special glass reinforced blend with **exceptionally low dielectric loss**, is specifically developed for mm wave range applications such as radar sensor covers (radome).

It is suitable for injection molding at low wall thicknesses.

Material Features

- Unique compound, combining low dielectric properties & mechanical strength
- Development focus on low dielectric properties
- Low warpage versus standard PBT with 20 % glass fiber reinforced material
- Capable for low thickness molding (1 mm)
- Suitable for laser welding

Standard radome

Daikin low loss material

Scan for more information.



Typical Properties

Properties	Unit / Info	Value	Standard
Melt Flow Rate	g / 10 min 2.16 kg 280 °C	11	ISO 1133
HDT	°C	148	DIN EN ISO 75-2 (A)
Tensile Strength	MPa	60	DIN EN ISO 527
E-Modulus	MPa	4,200	DIN EN ISO 527
Elongation at break	%	5.2	DIN EN ISO 527
Impact Resistance	kJ / m ²	22	DIN EN ISO 179-1 / eU
Specific Gravity	g / cm ³	1.13	DIN EN ISO 1183
Dielectric Constant	@ 76.5 GHz	2.6	Automotive
Dielectric Constant	@ 61.5 GHz	2.6	Automotive
Dissipation Factor	@ 76.5 GHz	0.006	Automotive
Dissipation Factor	@ 61.5 GHz	0.002	Automotive

Daikin Chemical Europe Innovation Center

Daikin Chemical Europe Innovation Center opened its doors in 2021. The 2000 m² dedicated laboratory and office building is situated in the Phoenix West Technology Park in Dortmund, Germany.

With its offices, laboratories, warehouse and conference rooms, the building is designed to foster cooperation between teams and the exchange of knowledge: In addition to R&D, this includes marketing (identifying new focus areas for Daikin and enabling future growth) and technical services (supporting and expanding existing materials) with strong interaction with the sales function.



Contact

Daikin Chemical Europe GmbH

Am Wehrhahn 50

40211 Düsseldorf, Germany

Phone: +49 211-179225-0

Fax: +49 211-1640732

daikinchem.de