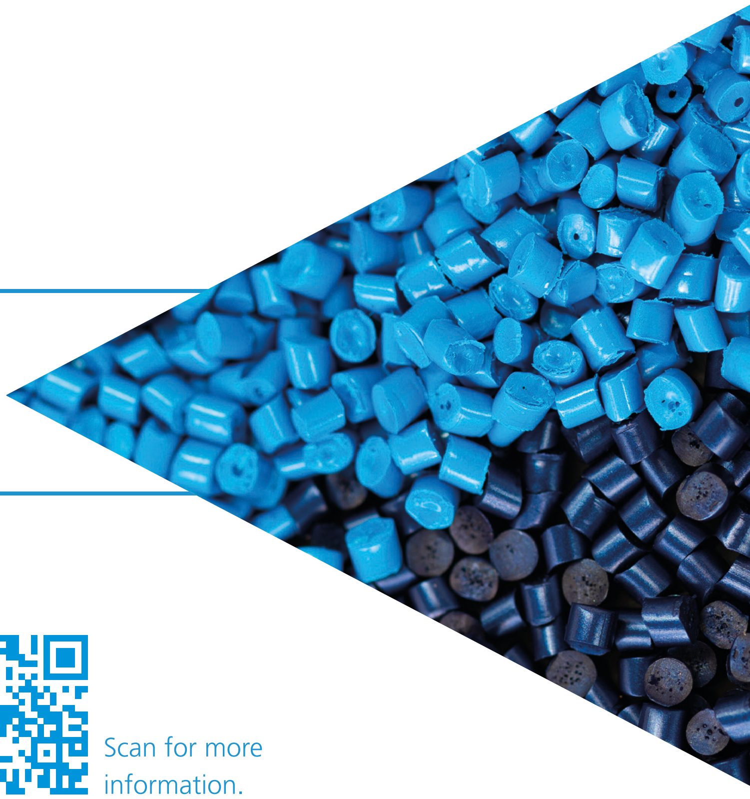
ADVANCED COMPOUNDS



Daikin Chemicals offers advanced compounds based on high-performance thermoplastics:

- PEEK, LCP, PPS, PA410 and more
- Unique PEEK/F blends

Scan for more information.

Specialty compounds by Daikin Chemicals provide particular properties:

- High temperature resistance
- Chemical resistance
- Durability
- Thermally conductive
- Electrically conductive
- Low dielectric loss
- Wear resistance
- Tribological characteristics
- Lightweight

Application examples:

- Gaskets
- Valves
- Parts in thermal management systems
- Heat sinks
- Bipolar plates
- Radiator housing
- Radar sensor covers (Radome)
- Parts with EMI/RFI shielding properties
- Components in pumps and compressors
- Housings and covers

Market Applications

- ENERGY
- MOBILITY
- INDUSTRIAL
- HEALTHCARE
- AEROSPACE

RADOME

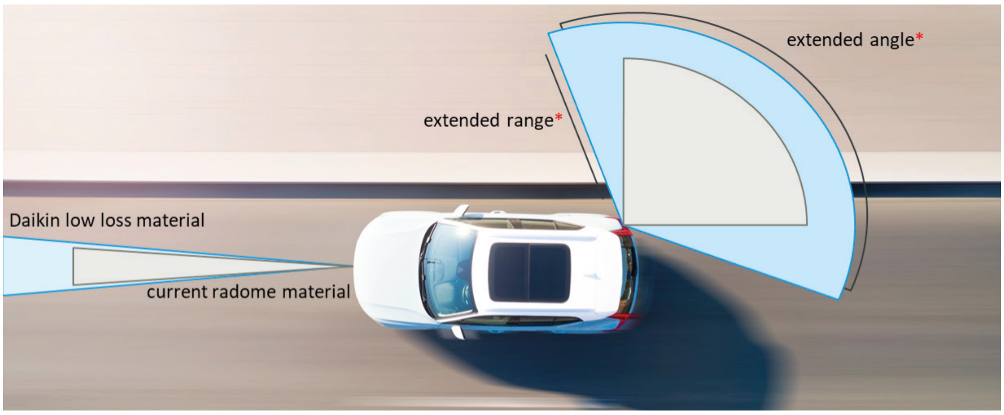
Daikin's low loss compound*, a special glass reinforced blend with exceptional low dielectric loss, is specifically developed for mm wave range applications such as radar sensor covers (radome). It is suitable for injection molding at low wall thicknesses.

As the reality of autonomous cars gets closer every day, advanced driver assistance systems (ADAS) are bridging the gap between traditional cars and the cars of tomorrow.

Slowly but surely, cars are taking on more tasks by themselves and increasing the safety of drivers, passengers and everyone else on the road.

Across the mobility supply chain, we're seeing developments in intelligent technology and supporting software that will form the foundations of fully autonomous cars.

*under development



*extension depends also on sensor design

Scan for more information.

- As a reference: corner radar typically mounted behind painted bumper with 2-way transmission loss up to 6 dB = ~ 30 % loss in range
- Daikin´s new low loss material provides only 0.6 dB = ~ 3.4 % loss in range
- If radome material thickness is optimized on sensor design, overall delta in transmission loss is very small, resulting in extended range and angle compared to "standard" radome material

Properties	Unit / info	Value	Standard
Melt Flow Rate	g/10 min | 2.16 kg | 270 °C	7	ISO 1133
Melt Flow Rate	g/10 min | 2.16 kg | 280 °C	11	ISO 1133
HDT	°C	148	ISO 75-2 (A)
Tensile Strength	MPa	60	ISO 527
E-Modulus	MPa	4200	ISO 527
Elongation to break	%	5.2	ISO 527
Specific Gravity	g/cm^3	1.13	ISO 1183
Dielectric constant	@76.5 GHz I @ 61.5 GHz	2.6 I 2.6	internal
Dissipation factor	@76.5 GHz I @61.5 GHz	0.006 I 0.002	internal

Note: Typical properties are not suitable for specification purpose and engineering

Typical application: Injection molding