



PREPERM[®]
PREMIX BRAND.



RF MATERIALS

www.preperm.com

MAXIMIZE YOUR RF PERFORMANCE WITH PREPERM®

Optimal RF properties

- **Well-controlled dielectric constant range 2.55-25**
- **Ultra-low loss even at mmWave frequencies**
- **Stable performance even up to 220 GHz**

Speed up your concept validation with

- **Stock shapes for machining**
- **Filaments for 3D printing**
- **Screws, components and lenses**
- **Customized prototyping service**

From prototyping to mass production

- **Injection molding process enables flexible product designs**
- **Scaleable production**
- **Customized sheets in high volumes**
- **Consistent quality in mass production**
- **Excellent total cost performance compared to traditional materials**



PREPERM® WEBSHOP
for concept validation

Verification of your idea has
never been easier!

www.preperm.com/webshop

"We believe that the best solutions are the ones we create together with our customers - you provide the specs, we offer the solution."

Tuomas Kiikka, Business Development Director

New technologies require new materials

The rapid technology development requires new frequency ranges and bandwidths. This is a challenge for material performance.

Premix's ultra-low loss PREPERM® materials provide solutions for tomorrow's mmWave frequency demands. Isotropic and consistent PREPERM® materials are designed for many RF designs such as antennas, radomes, resonators or filters. PREPERM® technology enables a high degree of customization based on individual customer needs. The dielectric material properties will be tailored to fit perfectly on the design in hand.

Creating a safe and ultra-connected society with functional plastics

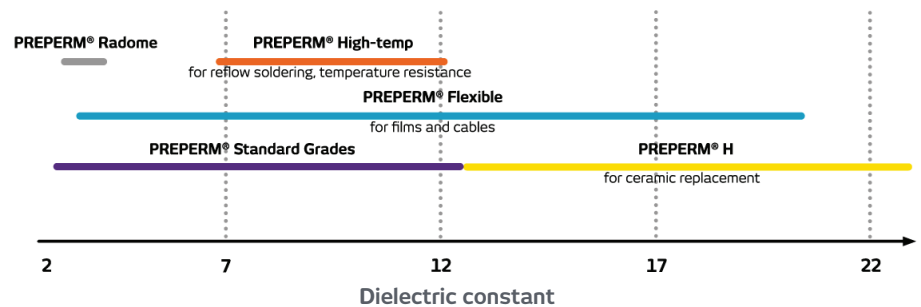
That's our purpose – plain and simple. Our ultra-low loss PREPERM® materials are used for example in automotive radars to gain the extra second that can save lives. And when it comes to ultra-connected society, we are happy to be involved in countless game-changers related to 5G and autonomous driving.

We ride the waves of tech innovations and constantly aim higher. We eagerly look for new challenges and solve them together with our customers. This is how we create materials that matter.



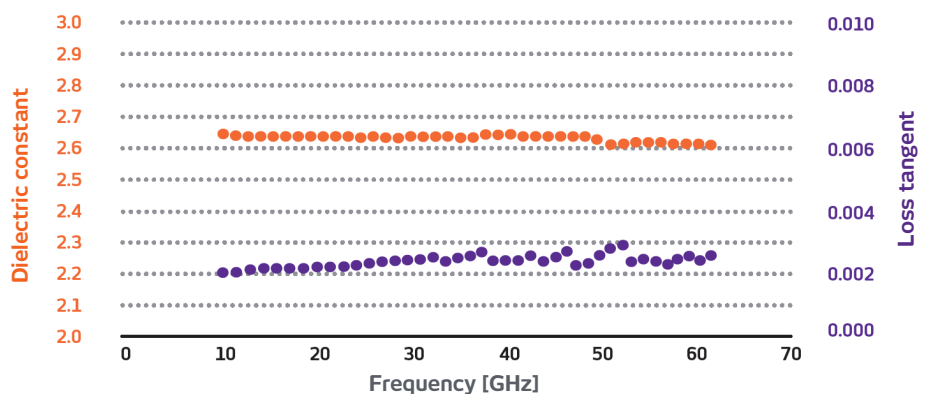
The advantages of PREPERM® materials relate to e.g more efficient data transfer (antennas, mobile base stations, satellite communication), better sensitivity (GPS, radars, radomes) and longer battery life (mobile and IoT devices).

Product portfolio for your applications



Our PREPERM® portfolio includes a wide range of materials to match the requirements of your application.

Illustration of stable dielectric properties as a function of frequency



Measurements for PREPERM® L260 grade dielectric properties performed at VTT Technical Research Centre of Finland Ltd and they reflect the typical dielectric properties of PREPERM® range.



PREPERM® is a sustainable choice

Products' life-cycle and environmental footprint are important factors for designers. PREPERM® helps to design more sustainable products. Now the benefits of thermoplastic materials are available also for the applications traditionally produced from ceramics or thermoset plastic materials.

- weight reduction through lower density
- lower loss equals lower energy consumption
- RoHS and REACH compliant, halogen and heavy metal free
- recyclable

Premix's nearly 40-year expertise lies in formulation and production of functional plastic materials. Premix's materials are more than just traditional plastics – they play an active role in the product or process they are integrated. Premix was one of the first companies entering the market of electrically conductive plastics in early 1980's and is now the world's leading specialist in the area. Today, we are global forerunners also in the field of innovative RF plastic materials and solutions.

We are ready for your challenge!

RF Materials / PREPERM®



PREPERM® Sales team

