

# ELECTRICALLY CONDUCTIVE COMPOUNDS AUTOMOTIVE INDUSTRY

PREMIX



## **FOR SAFE FUEL HANDLING**

**PRE-ELEC®: PE-HD based compounds for fuel filler necks, filler pipes and fuel transfer pipes**

- **excellent processability (high MFI)**
- **good weldability**
- **high-gloss, smooth surface, less fuel turbulence**
- **suitable for extrusion, blow molding and injection molding**
- **suitable for mono- and multilayer pipes**
- **bio-fuel compatible**
- **constant electrical properties**
- **lower total costs**

# We offer just one product. A solution. Generating this solution is our job. Our way of working is based on strong dedication to our customers: We share the targets, but the challenge is ours.

## Think of us when refueling your car

At gas stations, vaporised fuel and air together form an explosive atmosphere. In order to secure a safe environment, all ignition sources must be eliminated. Static electricity is one of these.

The best way to control electrostatic build-up in automotive fuel systems and fuel transfer pipes is to use conductive plastic material to be in direct contact with fuels.

## Electrically conductive compounds for automotive fuel systems

Premix offers electrically conductive PE-HD based PRE-ELEC® compounds for fuel systems.

The products feature excellent processability both in extrusion blow molding and injection molding applications. The same materials can be used for filler pipes and heads. This advantage enables significant cost savings in the overall fuel system.

Thinner layer thickness with stable mechanical and biofuel resistant characteristics offer a unique combination of properties. The materials have constant electrical conductivity over time and enable high-gloss filler pipe surface.

## PREMIX – Innovative and reliable product concepts

Premix is the leading specialist in electrically conductive plastics and other unique plastic solutions. We have gained profound knowledge in carbon black dispersion and polymer modification.

Over the years we have built up a comprehensive product portfolio cov-

$\Omega$	Resistance	
$10^{16}$	Insulating	POLYMERS
$10^{14}$		
$10^{12}$		
$10^{10}$	Electrostatic Dissipative	PRE-ELEC® ESD IDP compounds
$10^8$		
$10^6$	Electrostatic Conductive	PRE-ELEC® carbon black and fiber compounds
$10^4$		
$10^2$		
$10$		
$10^{-2}$	Highly Conductive	PRESEAL® highly conductive elastomers METALS
$10^{-4}$		
$10^{-6}$		

Premix's comprehensive product portfolio covers the whole resistance spectrum.

ering the whole resistance spectrum ranging from electrostatic dissipative IDP compounds to highly conductive EMI elastomers.

Today, our products are widely used in electrostatic discharge (ESD), explosive atmospheres (ATEX) and metal replacement applications. Along with the automotive industry, we also serve many customers in the chemical, construction, electronics, medical and mining industries.

We are committed to creating innovative and reliable plastic raw material solutions for our customer's specific needs. The best success stories are generated from long term customer partnerships.



Fuel filler necks produced from PRE-ELEC® compounds ensure vehicle grounding during refueling.



Safe fuel flow in conductive PRE-ELEC® inner layers.



Conductive PRE-ELEC® inner layers prevent static build-up.



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CARING. CREATING. COMMITTED.

**We Care. We know that we can make good things even better. We Create by challenging ourselves every day. We are Committed to doing things better. This is our way of fulfilling our promise. Both to ourselves and to our customers.**