

**ELECTRICALLY  
CONDUCTIVE COMPOUNDS**  
CHEMICAL AND  
MINING INDUSTRIES

**PREMIX**



## **FOR A SAFE WORK ENVIRONMENT**

**PRE-ELEC®: PE-HD and PP-based compounds and concentrates for multi- and monolayer pipes meet the requirements set for pressure pipes**

- coal mines
- chemical and processing industry
- construction industry

**PRE-ELEC®: PE-HD based compounds and concentrates for canisters, pails and drums**

- coal mines
- chemical and processing industry

**PRE-ELEC®, PRE-ELEC® ESD: PE-LD/LLD, copolymer and TPU-based compounds for extruded flexible hose systems, blown film inner-liners and bag-in-boxes**

- dust and sawdust extraction
- safe handling of chemicals, powders and foodstuffs

## **LOOKING FOR A TAILORED SOLUTION?**

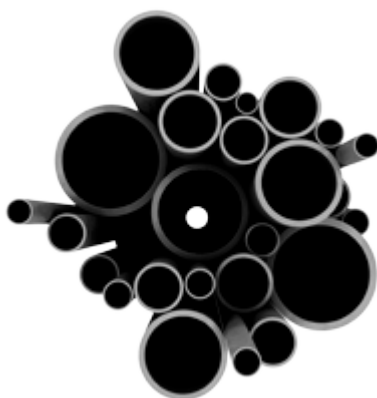
**We also offer several other options for conductive fillers and a wide range of polymers to choose from. Our expertise is at your service!**

# 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.

## Safety in hazardous environments

People and environment safety is a key issue when flammable and hazardous liquids, gases and powders are processed, transported and used. It is exceedingly important to secure an explosion-free environment – a single spark can lead to serious consequences.

When electrically conductive plastic materials are in direct contact with hazardous substances, generation of electrostatic charges will be eliminated. These high-quality plastics also ensure lightweight, corrosion-resistant and durable end product solutions.



**Corrosion resistance, weight reduction and increased operating life.** PE-HD based conductive PRE-ELEC® compounds last longer than metals in demanding mining environments.



**Good mechanical properties and weight reduction.** PE-HD based conductive PRE-ELEC® compounds for containers and canisters.

## Electrically conductive compounds for ATEX applications



According to ATEX (explosive atmospheres) regulations, materials used in ATEX applications must not accumulate electrical charges. This limits the use of plastic materials because they are insulating by nature. The easiest way to overcome the problem is by using conductive plastics.

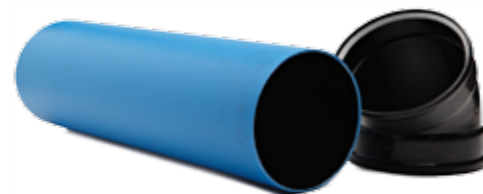
Electrically conductive carbon black-based PRE-ELEC® compounds and concentrates ensure durable and reliable product constructions. They are the right choice when looking for a superior price-performance combination.

## 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.



**Excellent durability.** PE-LD/LLD, copolymers and TPU-based conductive PRE-ELEC® compounds for flexible tubes and hoses.



**Lightweight and easy to assemble.** Conductive PRE-ELEC® innerlayer has enabled metal replacement in ventilation pipe systems.

$\Omega$	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	Highly Conductive	PRESEAL® highly conductive elastomers METALS
$10^{-2}$		
$10^{-4}$		
$10^{-6}$		

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

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

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



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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.**