

VARIOCHEM

⚡ P113[®] ESD ⚡



Introduction

A few years ago, Interseal developed **Variochem P113®**, an elastomer designed to simplify, through its performance, the choice of users in front of the great variety of materials used in the manufacture of seals.

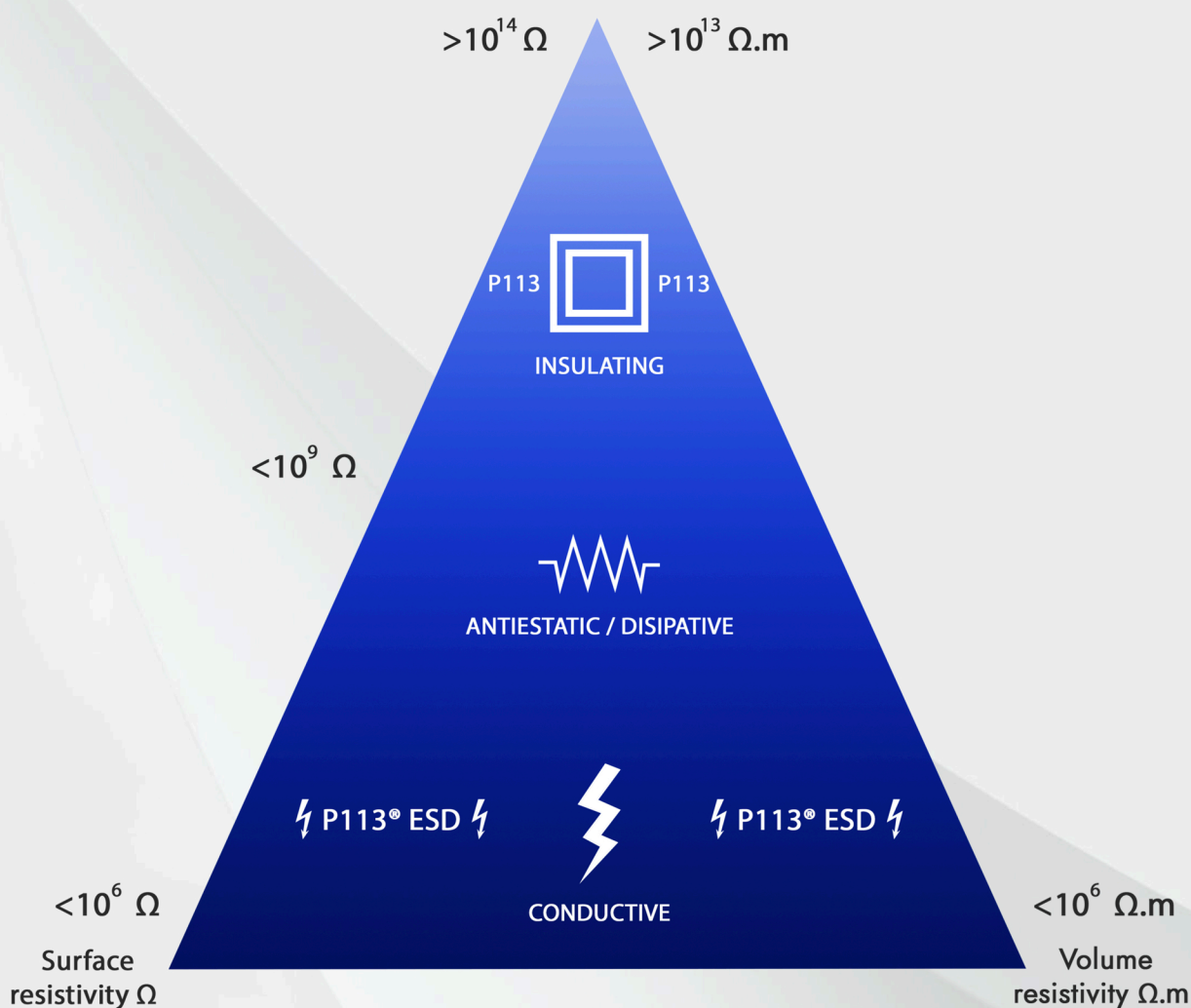
Today, the ATEX directive (of Explosive Atmospheres) applies in France by virtue of the respect of the conditions dictated by the Labour Code.

Faced with the lack of proposals and knowledge of machine manufacturers regarding the sealing part of these ATEX zones, we are increasingly requested by users to find solutions.

The Atex directive 2014/34/EU does not apply to rubber seals. However, below a value of $10^9 \Omega$, the surface resistivity can be considered low enough to avoid any risk of dangerous electrostatic discharge. This risk will depend on the final product, application and installation.

Therefore, we have developed a high-performance, conductive material: the **P113® ESD**.

Representation of the resistivity



Technical specifications

P113® ESD is a static dissipative tetrapolymer FKM with a hardness of 75 ±5 SHA. It is best in class for chemical and fuel resistance.

It is specially designed to prevent electrostatic discharge (ESD). Its low resistivity level eliminates electrostatic charges that occur on the part. Designed for explosive atmosphere environments (ATEX). Temperature resistance from -15 to +200°C.

	Unit	Standard	Specific	P113	⚡ P113 ESD ⚡
Specific gravity	g/cm3	ASTM D297	± 0,02	1,92	1,92
Hardness	Shore A	ISO 48	± 5	75	74
100% modulus	MPa	ISO 37	-	6	4,6
Tensile strength	MPa	ISO 37	-	19,6	18,5
Ultimate elongation	%	ISO 37	-	240	262
Compression set	%	ASTM D395	Initial def. 25%	18	17
Surface resistivity	Ω	ISO 14309	-	6×10^{15}	$2,5 \times 10^5$
Volume resistivity	Ωm	ISO 14309	-	$1,5 \times 10^{12}$	$2,9 \times 10^2$

® P113 is a registered brand of Interseal





Interseal is also the elaboration of elastomer mixtures,
their transformation, a material analysis laboratory,
advice, studies and training.



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