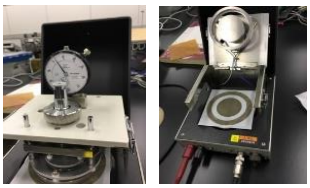
Electrical resistance statements of ROVAL series

< Test Method >

Measuring instrument	Ultra-high resistance meter: 8340A Resistivity Chamber: R12702A
Electrode Diameter	Main electrode: Φ50 mm Guard electrode (inner diameter): Φ70 mm
Electrode pressure	5 kg
Applied voltage	10 V (ROVAL ALPHA only 1 V)
Test sample	Steel plate (SPCC SD): 100 x 100 x t 0.8mm Film thickness 80μm
Testing institution	Osaka Research Institute of Industrial Science and Technology

Ultra-high resistance meter: 8340A



Resistivity Chamber: R12702A

< Summary of Test result >

Test results show that ROVAL ALPHA with flake zinc powder has the lowest resistivity, and others tend to have higher resistivity as the zinc content of the dry film is lower. Also, it has the characteristic that the resistivity becomes low when the film is under pressure.

Low resistance	← Resistivity trend →		High resistance
ROVAL ALPHA	<	ROVAL EPO ROVAL	< ROVAL SILVER

< Resistivity Test Result of ROVAL series >

Product name	Zinc content	Volume resistivity (Ω·m)	Surface resistivity (Ω/□)
ROVAL Cold Galvanizing Compound	96 %	$1.0X10^{7}$～10^{9}	$1.0X10^{10}$～10^{12}
EPO ROVAL Cold Galvanizing Compound			
ROVAL ALPHA Zinc Rich Compound	92 %	$1.0X10^{6}$～10^{8}	＞ $1.0X10^{13}$
ROVAL SILVER Zinc Rich Compound	83 %	$1.0X10^{8}$～10^{10}	＞ $1.0X10^{14}$

* Each paint has been tested on the recommended film thickness (80μm).
* The surface resistivity of antistatic materials is usually 10^{6}~10^{8}Ω/□.
* When the film thickness, test condition, measured load and measured voltage are different, the values displayed by the instrument will also be different.