

# RESINS

## P5G - P6G



The E.C.M. acrylic resins have been developed to ensure the installation of piezoelectric sensors, loops, and roadway state sensors, etc. both in asphalt constructions and in concrete slab roadways.

Through their ease of use and their mechanical properties, these products facilitate installation and ensure a long lifespan.

The table below summarizes the different types of resins available.

Resin reference	Sensor utilization	Type of roadway	Colour of the resin
P5G	<ul style="list-style-type: none"> <li>- PIEZOLOR,</li> <li>- Stainless steel support SUP1 and SUP2 for resistive sensor.</li> </ul>	<ul style="list-style-type: none"> <li>- Asphalt,</li> <li>- Concrete.</li> </ul>	Grey
P6G	<ul style="list-style-type: none"> <li>- Axor k,</li> <li>- Induction loop.</li> </ul>	Asphalt	Grey



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## PROPERTIES

RESINE/PROPRIETE	P5G	P6G
Composition of a kit	1 plastibag of resin + 1 catalyst bag	Ditto
Expire date of storage (+5 °C to +30 °C)	1 year	1 year
Packaging resins Packaging catalyst	6 kg plastibag 150gr bag	6 kg plastibag 150gr bag
Density after mixing	1,79 kg/l	1,78 kg/l
Preparation time	4 mn	4 mn
Duration of use : ■ at 5°C ■ at 25°C ■ at 40°C	20 mn 10 mn 4 mn (*)	See P5G
Drying time : ■ at 5°C ■ at 25°C ■ at 40°C	40 mn 20 mn 8 mn	See P5G
Resistance to abrasion (ASTMC944)	4,20 gr	See P5G
Resistance to compression (ASTM 116-90)	24700 kPa	See P5G
Dynamic properties : ■ Complex module at 0°C at 25°C at 50°C ■ Phase angle (radian) at 0°C at 25°C at 50°C	132 MPa 27 MPa 9 MPa  0,25 0,48 0,63	
Bending strain	17700 kPa	17700 kPa
Variation in size during drying	0%	0%
Coefficient of expansion	1010-6/°C	1010-6/°C
Viscosity	25Pa-s	
Compatibility test with the roadway : ■ asphalt	129 OkPa	
Adhesion resistance to bending ■ concrete	3870 kPa	
Shearing resistance ■ asphalte ■ concrete	820 kPa 760 kPa	
Resistance to traction ■ asphalte ■ concrete	97 kPa 214 kPa	

(\*) The use of 50 % catalysing agent lengthens the setting time.