

RAPID PROTOTYPING RESIN

# SYNTHENE PR 700

INNOVATION AND QUALITY IN VACUUM CASTING

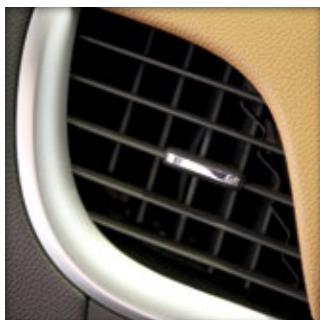


## PR 700 PREMIUM VACUUM CASTING RESIN FOR PRODUCT DEVELOPMENT AND DESIGN

- » For automotive, electrical industry & industrial design
- » Countertype of series material
- » Very good mechanical properties combined with a high HDT of 130 °C



SYNTHENE 2014 09 18 001 EN



### MECHANICAL PROPERTIES OF PR 700

- » A high flexural modulus of 2300 Mpa (333,600 PSI) combined with a 130 °C (266°F) HDT enables a large range of applications
- » Elongation at break, flexural strength and impact resistance meets ABS-series material requirements for sophisticated shapes in prototyping - and small series production

### THE BENEFITS OF USING PR 700

- » Simple processing
- » Low viscosity of 600 mPa · s enables fast degassing under vacuum and easy filling of the tools
- » A 7 minute pot-life optimally adapted for large parts
- » Very low aggressiveness to silicone allows a huge amount of castings per mould

### PR 700 TECHNICAL DATA <sup>1</sup>

Hardness (Shore A/ D)	80D	
Countertype of	ABS	
Colour	black	
Flexural Modulus ISO 178	2300 Mpa	333,600 PSI
Maximal flexural strength ISO 178	80 Mpa	11,600 PSI
Elongation at break ISO 527	13 %	
Tensile strength ISO 527	60 Mpa	8,700 PSI
Charpy impact resistance	60 kJ · m <sup>-2</sup>	28.5 ft · lb/in <sup>2</sup>
Heat Deflection Temperature ISO 75 Ae	130 °C	266°F
TG glass-transition temperature	137 °C	279°F

<sup>1</sup> For the exact data, please refer to our technical datasheet, subject to change. Heat resistance and mechanical properties measured after heat treatment

<sup>2</sup> Test reports and data available on request

### AVAILABLE REPORTS ON PR 700 <sup>2</sup>

Dielectric data	<ul style="list-style-type: none"> <li>» CTI Data</li> <li>» Dielectric strength</li> </ul>
Chemical resistance	<ul style="list-style-type: none"> <li>» Engine oil, diesel, brake fluid</li> <li>» Aqueous solutions: waters, acids</li> <li>» Other data available</li> </ul>
Fire resistance	<ul style="list-style-type: none"> <li>» VW TL-1010</li> <li>» UL-94 HB</li> </ul>
EU-Directives	<ul style="list-style-type: none"> <li>» REACH</li> <li>» SVHC</li> <li>» ROHS</li> <li>» MERCURY-FREE</li> </ul>
Recycling compliance	<ul style="list-style-type: none"> <li>» IMDS [International Material Data System]</li> </ul>

### ABOUT SYNTHENE

The innovative chemical company, located in France, was founded in 1958. SYNTHENE provides specific formulation and high quality industrial solutions. SYNTHENE places a particular emphasis on offering high-performance products, with cautiously selected raw materials from trustworthy manufacturers. All SYNTHENE Prototyping resins meet the current requirements of REACH and SVHC.

#### SYNTHENE HEADQUARTERS

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