

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

Available in the UK from

ebalta
Distribution Ltd.



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 ¹

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 ⁻²	28.5 ft · lb/in ²
Heat Deflection Temperature ISO 75 Ae	130 °C	266 °F
TG glass-transition temperature	137 °C	279 °F

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

² Test reports and data available on request

AVAILABLE REPORTS ON PR 700 ²

Dielectric data

- » CTI Data
- » Dielectric strength

Chemical resistance

- » Engine oil, diesel, brake fluid
- » Aqueous solutions: waters, acids
- » Other data available

Fire resistance

- » VW TL-1010
- » UL-94 HB

EU-Directives

- » REACH
- » SVHC
- » ROHS
- » MERCURY-FREE

Recycling compliance

- » IMDS
[International Material Data System]

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

Ferme de l'Evêché
CS 20308
60723 Pont Sainte Maxence
France

T +33 3 44 31 72 00
F +33 1 57 67 44 58

comm@synthene.com
www.synthene.com