Q Barnes

Technical Data Sheet

Product Name

BQUEEN®

72 Shore D Polyurethane Casting System

Product Description

bqueen is a two-component rigid urethane casting compound. It cures to Shore 72D and is pale amber in colour. bqueen can be sanded and polished to create beautiful resin jewellery pieces and is compatible with a wide range of the Barnes colourant range, including Polyurethane pigments, PSTF dyes and Pearlex Powders. bqueen also accepts a wide range of fillers for metal.

Typical Applications

Jewellery

Physical Properties

Hardness		Shore D	72±2
Specific Gravity, cured		[g/cc]	1.03
Colour			Pale Amber
Ultimate Tensile		[psi]	4091
Elongation		[%]	7.7
Heat Deflection		[°C]	56
Shrinkage, linear	unfilled	[in/in]	0.0154

Handling Properties

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Mix Ratio	By Weight	Part A	100 pbw
		Part B	85 pbw
Mix Ratio	By Volume	Part A	100 pbv
		Part B	100 pbv
Viscosity	cps @ 25°C	Mixed	110
Work Time	100g mass @ 25°C		2 – 2.5 minutes
Gel Time	100g mass @ 25°C		3-4 minutes
Demould Time	@ 25°C		15+ minutes (note 1)
Cure Schedule	7 days ambient; or demould followed with post cure of 16 hours @ 70°C is recommended to promote maximum physical properties as given above		

Storage

Store at room temperature in a dry area.

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Safety

Use in a well ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction.

Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

If Contact Occurs:

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse.

Seek medical attention if allergic reactions occur.

Eyes: Immediately flush with water for at least 15 minutes, contact a physician.

Ingestion: If swallowed, contact a physician immediately. Remove stomach contents by gastric suction or induce

vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious

person.

Note 1

Bqueen generally cures to a demouldable state in about 15 minutes; however, thin sections or certain part configurations may require more in-mould cure time. Sections that are less than 3mm may require 30 minutes or more before demould.

Note 2

Both components should be mixed before each use to ensure uniformity of the materials. Opened containers of material should be purged with F720 Dry Air Blanket prior to replacing lids or caps, to prevent moisture contamination from humid air.

Issue Date

5th July 2017

Revision Number

1

Disclaimer

The data presented in this leaflet are in accordance with the present state of our knowledge, and does not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Recommendations for use do not constitute a warranty, either expressed or implied, of the fitness or suitability of the product for a particular purpose.