

# 4PU A/B

## 75 SHORE D POLYURETHANE CASTING SYSTEM

### PRODUCT DESCRIPTION

4PU is a low viscosity, rapid setting, 100% solids rigid urethane compound. This system is easy to process and has a low exotherm of 76°C maximum. 4PU will cure quickly to a hard, tough casting. 4PU is generally insensitive to moisture during and after curing and is suitable for use with most general purpose dry fillers. Applications include ornamental mouldings, prototypes, models, picture frame, decorative components and most general applications where both high tensile strengths and flexibility are required.

### Physical Properties

Hardness		Shore D	75±2
Specific Gravity, cured		[g/cc]	1.12
Colour			White
Tensile Strength		[psi]	5000
Elongation		[%]	18.0
Modulus		[psi]	139,300
Shrinkage, linear	unfilled	[in/in]	0.01 unfilled
Izod Impact		[ft.lbs./in.]	0.66

### Handling Properties

Mix Ratio	By Weight	Part A	100 pbw
		Part B	100 pbw
Mix Ratio	By Volume	Part A	48 pbv
		Part B	52 pbv
Viscosity	cps @ 25°C	Part A	200
		Part B	315
		Mixed	250
Work Time	100g mass @ 25°C		3.5-4 minutes
Demould Time	@ 25°C		15+ minutes (note 1)
Cure Schedule	3 days ambient; or demould followed with short post cure of 4-6 hours @ 60-65°C is recommended to promote maximum physical properties		

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Issue: new tds

Date: 18<sup>th</sup> October 2007

The data presented in this bulletin 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.

**Note 1:**

4PU generally cures to a demouldable state in about 15-30 minutes; however, thin sections or certain part configurations may require more in-mould cure time. 4PU gains increasing toughness early in the cure cycle and thick sections, 10mm or greater, may be demoulded much sooner. Sections that are less than 3mm may require an hour 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.

**Storage:**

Store at room temperature in a dry area.

**Pack Sizes Available:**

U-4PU-VT	500gm kit
U-4PU-T	1kg kit
U-4PU-S	2kg kit
U-4PU-M	10kg kit
U-4PU-L	36.3kg kit

**Safety Precautions:**

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 laundry 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.