



# Polycraft Polyfoam Soft 100

## Low Density Flexible Polyurethane Foam System

<b>2:A-1:B*</b>	<b>20-30 Sec</b>	<b>25 Min</b>	<b>White</b>	<b>Variable</b>	 <b>20-25°C</b>	<b>8-9</b>
Mix Ratio By Weight	Pot Life (20°C)	Demould Time (35°C)	Cured Colour	Hardness	Working Temperature	Approx. Rise

### Technical Overview

Property	Component	Value
Material	A B	Polyol isocyanate
Colour	A B	Hazy Amber
Viscosity (mPas) @25°C	A B A&B Mix	1000-1200 60-80 530-640
Density @ 25°C g/cm3	A B A&B Mix	1.08 ± 0.05 1.12 ± 0.05 1.10 ± 0.05
Mix Ratio *Variable mix ratio possible	A&B Mix	2.5A:1B - Super Soft 2A:1B - Soft 1.5A:1B - Medium 1A:1B - Firm
Approximate Rise	A&B Mix	8-9

Property	Unit	Value
Free Rise Density	kg/m3	80-120
Nominal Hardness	Shore A	2-4
Cured Colour	-	White
Cream Time (100g @20°C)	Seconds	20-30
Rise Time (100g @20°C)	Minutes	1.5-2
De-Mould Time (Mould @ 35°C)	Minutes	20-25
Full Cure (100g @20°C)	Hours	12-24

### Storage / Shelf-life

Polycraft Polyfoam 100 should be stored between 18°C and 25°C. Under these conditions, shelf-life in the original, unopened containers is six months. Care should be taken to avoid contact with moisture as this is a moisture sensitive product.

Store in a dry place and reseal containers immediately after use. Shelf-life is reduced after opening and remaining product should be used as soon as possible. A dry gas blanket may be used to help extend the life of the material after opening.

### Product Overview

Polycraft Polyfoam Soft 100 is a low density flexible polyurethane foam system, Typical density range of 100kg/m3. Easily pigmentable using the polycraft pigment and dye range. Low viscosity, CFC Free and non flammable. May be used at varying ratios for a range of foam softness. Formulated for a moderate self skinning finish, technical characteristics allow for manual or machine mixing, however machine mixing will produce best results. Used in a variety of industries such as Art, Craft, Film & TV, Upholstery applications and more.

### Instructions for Use

#### Preparation

- Ensure both components are in the correct temperature range (20-25°C)
- Mould or item to filled must be clean and dry
- Select a suitable mixing container which is capable of holding at least twice the quantity to be mixed.
- Use a wax release agent if required
- If using mechanical mixer ensure you mix at appropriate speeds
- Prepare cleaning equipment in advanced for mechanical mixing (for cleaning of mixing paddle etc.)
- Determine quantity needed, trial runs may be required to find the required amount (For quantity, take your overall mould volume and divide it by the approximate rise, keep in mind, temperatures, and mixing technique, mould type and shape can cause variance in the rise height, so trials are highly recommended).

#### Mixing/Pour/Demould

- With care quickly measure and combine quantities using desired ratio with digital scales.
- Mix material together, ensure to thoroughly mix contents, incorporating additional air from the mix is encouraged as this helps the structure of the foam, Briefly mixing into the cream stage (usually 3-4 seconds) will also help, but care is needed not to mix further as this can negatively effect the foam structure and overall rise.
- Once material has reached cream stage quickly pour into mould an allow to rise.
- If using a closed mould you must account for the generation of pressure, if required run a trial to ensure quantities are close to desired levels, as excessive amounts of extra foam can lead to high levels of pressure which can be potentially hazardous.
- Once the foam has cured, demould carefully and gently squeeze and flex the cast foam part as this will help to equalise the stresses in the foam structure and can also help reduce shrinkage when fully cured.

### Health and Safety

Before use please read product labels, technical sheets and safety data Sheets and ensure you have adequate understanding of the safety precautions and directions before using the materials.