



Polycraft Polyfoam Rigid 500

High Density Rigid Polyurethane Foam System

1:A-1:B	35-45 Sec	25 Min	Yellow	470-600 kg/m³	 20°C	1.5-2
Mix Ratio By Volume	Pot Life (20°C)	Demould Time (20°C)	Cured Colour	Free Rise Density	Working Temperature	Approx. Rise

Technical Overview

Property	Component	Value
Material	A B	Polyol Isocyanate
Colour	A B	Hazy Brown
Viscosity (mPas) @25°C	A B	2500 150-270
Density @ 25°C g/cm ³	A B	1.07 ± 0.05 1.24 ± 0.05
Mix Ratio (Volume) Mix Ratio (Weight)	A&B Mix	1A:1B 86A: 100B
Approximate Rise	A&B Mix	1.5-2

Property	Unit	Value
Free Rise Density	kg/m ³	470-600
Cured Colour	-	Yellow
Cream Time (100g @20°C)	Seconds	35-45
Rise Time (100g @20°C)	Minutes	2-3
De-Mould Time (Mould @ 20°C)	Minutes	20-30
Full Cure (100g @20°C)	Hours	12-24
Compressive Strength	Parallel Rise BS4370	9000kPa
Compressive Strength	Perpendicular Rise BS4370	9000kPa

Storage / Shelf-life

Polycraft Polyfoam 500 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 Rigid 500 is a closed cell rigid polyurethane foam system with good compressive strength and cell structure. Designed for a slow rise with a cream time of 30-40. A very low tendency to break or crumble making it ideal for a range of applications such as film prop and set design, model scenery design, back filling of slush castings, sound deadening and more. CFC & HCFC Free

Instructions for Use

Preparation

- Ensure both components are in the correct temperature range (20-25°C)
- Mould or item to be 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
- (Mechanical mixing will offer best results)
- Prepare cleaning equipment in advance 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 30-40 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 and 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

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.