

### SHAKUN POLYOL F100HD

Shakun Polyol F100HD is a flexible polyurethane system for the production of polyurethane flexible moulded foams for bed mattresses and pillow cushions. The foam has a good surface finish with excellent cell structure and good inter-laminar adhesion. The system is eco-friendly CFC free. It is ideally processed through high-pressure impingement mixing.

### PRODUCT SPECIFICATION

SI. NO.	CHARACTERISTICS	UNIT	SPECIFICATION
1	Appearance	None	Liquid
2	Colour	None	White - Yellow
3	Density	g/ml	1.05 – 1.08

### REACTION SPECIFICATION

SI. NO.	CHARACTERISTICS	UNIT	SPECIFICATION
1	Ideal Operated Temperature	Celsius	21°C
2	Mould Temperature	Celcius	25°C
3	Mix Ratio (Polyol : TDI*)	None	100 : 32 - 38
4	Cream Time	Seconds	10-12
5	Gel Time	Seconds	70-80
6	Track Free Time	Seconds	125-135

\* Wannate 8018 or Equivalent (Isocyanate)

The above processing/reaction characteristics would be expected using a low-pressure machine without heating. Using a high-pressure dispensing machine with primary and line heating would

speed up the system. The overall applied density varies because of the ambient and substrate temperatures as well as the number of layers required building up to the specified section thickness.

#### **FOAMING SPECIFICATION**

1	Moulded Density	g/L	60 - 75
2	Core Density	g/L	55-57
3	IFD @ 25%	Kgf/314	>18
4	Tensile Strength	Sq.cm	>1.03
5	Tear Strength	Kg/sq.cm	>0.5
6	Elongation	Kg/cm	<60
7	Resilience	%	<15
8	Compression Set 50% @ 70°C for 22hrs	%	>10

The above foam characteristics can be altered according to the user's expectations.

#### **STORAGE STABILITY**

The product must be stored out of direct sunlight and weather. The containers must be kept sealed against moisture at all times in storage. Ideal storage temperature is approximately 20°C. Under these conditions, the product will remain stable for 6 months.

#### **SAFETY PRECUATIONS DURING HANDLING**

Shakun Polyol is a blend of Polyether polyols and other components, which include a small percentage of tertiary aliphatic amines.

- Because of its alkaline character, Shakun Polyol may cause slight to moderate irritation when it is exposed to the skin, the eyes, and the mucous membranes.
- Safety goggles and impermeable protective gloves should always be worn if there is a risk of direct exposure when handling Shakun Polyol.
- Splashes that are exposed to skin must be wiped off immediately and the contaminated areas must be thoroughly washed with soap and water.
- Affected areas should be treated with a good barrier cream.
- To prevent further contact with the skin, contaminated clothing should be changed immediately and thoroughly cleaned before reuse.
- The product must be kept away from food items.

- Anyone involved in the application of the system must familiarize themselves with the safety precautions required of rigid polyurethane foam.

**DISCLAIMER**

The information in this technical data sheet is believed to be accurate but is made without warranty. The values listed are typical properties for the material and should not be considered product specifications. Shakun Industries disclaims any liability in connection with the use of this information, and does not guarantee against infringement because of the use of any of its products in combination with other materials or in any process.

---- END OF TECHNICAL DATA SHEET ----