Kuwait Polyurethane Industry Co. WLL



الشركة الكويتية لصناعات البوليوريثين دمم

TECHNICAL INFORMATION

SS 40 – SPRAY

Introduction

SS 40 - CFC free is a two component polyurethane system developed for the manufacture of rigid polyurethane foam. It has been designed for spray on roof applications that serves as an excellent insulation material. It is a CFC free system and thus complies with the environment friendly regulations act having the same properties of that of CFC based foams.

Applications:

SS 40 – CFC free is mainly used for spray applications. The grade is suitable to be processed with low and high pressure dispensing machines.

Component A-is a polymeric Diphenyl Methane Diisocyante and has following properties:

Appearance

: Clear Dark Brown Liquid

Viscosity @ 20⁰C Specific Gravity @ 20⁰C

220± 20 cps 1.25+0.001

Free Isocyanate Content %

: 31+0.5

Component B – is a blend of different polyols, additives and blowing agents. The blowing agent used is HCFC 141B that leads to the formation of polyurethane foam. The typical Properties of Component B are:

Appearance

Clear Pale Yellow Liquid

Viscosity @ 20°C

400+ 20 cps

Specific Gravity @ 20°C

: 1.20+0.001

The reaction profile of SS 40 CFC free is typically as follows:

For a laboratory cup test, when both components maintained at 20°C

And mix ratio being

Component A

100 pbw

Component B

100 pbw

Then reactivity is as follows:

Cream Time

5-6 seconds

Rise time

15-17 seconds

Tack Free Time

15-17 seconds

Free Rise Core Density

 $28-30 \text{ Kg/m}^3$

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Typical Foam Properties for Sprayed Foams Manufactured from SS 40

Spray Density	Kg/m ³	38-42
Closed Cell Content	%	>96
Initial Thermal Conductivity	W/m ⁶ K	0.020
Dimensional Stability (Linear Change)		
72 hrs at -20 ^o C	%	Maximum 1
72 hrs at 70 ⁰ C	%	Maximum 1
Compressive Strength (perpendicular to the main panel)	Kpa	180
*Test methods are available on request		

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Packing:

Component A

250kg net

Component B

220 Kg net

Storage Information:

We recommend the component containers to be kept in a dry and cool area at 20° C maximum. All the containers are to be kept well closed to avoid contamination with moisture or any other foreign matter that would result in a negative performance of the product.

The information give herein are true to the best of our knowledge and general industrial experience. However, the properties are subjected to change depending on the handling and processing conditions at the customer's end, which is not under our control.