

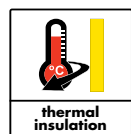
# PU FOAM SS-45A

## Two-component, spray-applied polyurethane foam system

PUFOAM SS-45 A is a CFC free, polymeric M.D.I based system to produce rigid polyurethane foam.

### CHARACTERISTICS

- ▶ Spray applied
- ▶ CFC free
- ▶ 45kg density



### DESCRIPTION

PUFOAM SS-45A is a two-component, spray-applied polyurethane foam that creates a seamless, monolithic barrier against water vapor and air. PUFOAM SS-45A is a CFC free, polymeric M.D.I based system for producing rigid urethane foam with a nominal core density of 45 kg/m<sup>3</sup> by spray process. The system may be applied to substrates where the surface temperature is of the order of 25 - 30°C. Grades, adjusted in reactivity, are available for both cold and hot condition.

### FIELDS OF APPLICATION

- roof spraying applications.
- flooring and wall insulation.
- storage tank insulation

### COMPONENT PROPERTIES

MDI component is a dark brown colored, undistilled grade of polymeric diphenyl methane di-isocyanate (crude M.D.I).

- viscosity @ 20°C. : 150 - 200 cps
- specific gravity @ 20°C 1.24
- NCO content, % wt. 30-31

Polyol Component is a low viscosity blend of polyols, blowing agent, catalysts and surfactant

- viscosity @ 20°C approx. 450 cps.
- specific gravity @ 20°C : 1.16

### STORAGE AND HANDLING

Store at room temperature in sealed drums. Moisture will react with this component to produce a surface skin of polymerized material. Protect from moisture and moisture vapour. Close all drums after use. Maximum permissible storage time is 6 months. The ideal storage temperature is between +20°C and +25°C. MDI may undergo partial crystallization at temperature below 0°C. The product can, however, be brought back into the liquid



TDS\_PU Foam SS45A\_GCC\_1019

1

state by placing the container in a heating cabinet and carefully warming the entire contents for a short time to a maximum of 70°C. Safety goggles, impermeable protective gloves and coveralls should always be worn when handling this product. Contaminated clothing should be removed immediately to prevent further skin contact. Store at room temperature (below 25°C.) in sealed drums. Close all drums after use to prevent loss of blowing agent and absorption of moisture.

### MIX RATIO

1:1 by volume.

Typical reaction rate and density (laboratory, cup mix) (both components at 20°C)

- cream time: 6 - 8 sec.
- tack free time: 15 - 25 sec.
- free rise density : 32 - 36kg/m<sup>3</sup>

Reactivity and density may vary depend on ambient temperature and grade.

### SUPPLY

PU Foam SS45A

Part A 220kg drum

Part B (MDI) 250kg drum

### COVERAGE

Average consumption of 1.7kg/m<sup>2</sup> with 3cm thickness

## TECHNICAL SPECIFICATION

PROPERTIES	VALUES	STANDARDS
Mix ratio, [volume:volume]	1:1	-
Final density, [kg/m]	43 to 48	ASTM D 1622
Application thickness, [cm]		
Min	3	
Max	10	
Compressive strength, [kpa]		
With rise	220 to 320	ASTM D 1621
Against rise	172 to 207	
Thermal conductivity @ 25°C, W/(mk)		
Initial value	0.023	ASTM C 518/19
Aged value	0.026	
Closed cell content, apparent vol, %	92 to 93	ASTM D 2856
Water vapor transmission, perm-inch		
All cut surfaces	2	ASTM C 518/91
With skin retained	1	
Water absorption, per cm <sup>2</sup> (gm/cc)		
Without protective coating	0.0087	ASTM C 272
With protective coating	0.0019	
Dimensional stability, % linear change		
7 days @ - 15°C	<1.0	ASTM D 2126
7 days @ 100°C	2	
7 days @ 70°C [100% RH]	2.5	
Fire resistance	Class B3	DIN 4102

All values given are subject to 5-10% tolerance

TDS\_PU Foam SS45A\_GCC\_1019

**2**

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed. The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.



Henkel Polybit Industries Ltd.; PO Box: 293, Umm Al Quwain, UAE  
 Tel: +971(6)76 70 777; Fax: +971(6)76 70 197; henkelpolybit@henkel.com  
 Henkel Polybit Industries Ltd.; PO Box: 5911, Dammam-31432, KSA  
 Tel: +96613808 4061 / 62, Fax: +966 13 812 1164; polybitdammam@henkel.com  
 www.henkelpolybit.com

**Quality for Professionals**