

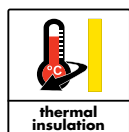
# Polyfoam PIR-40BA

## Two component, polyisocyanurate block system

Polyfoam PIR-40BA is an HCFC-blown & CFC free, polymeric M.D.I based system to produce rigid PIR foam.

### CHARACTERISTICS

- ▶ Injection/pouring grade
- ▶ CFC Free
- ▶ 40 Kg density PIR



### DESCRIPTION

Polyfoam PIR-40BA is a two-component, Injection/pouring grade polyisocyanurate foam system developed for rigid PIR blocks, which has greatly increased resistance to burning and spread of flame. The composition of Polyfoam PIR-40BA, when subjected to fire, the outer surface forms a strong carbonaceous layer which retards further flame spread and can withstand temperature up to 140°C. Polyfoam PIR-40BA is an HCFC-blown & CFC free, polymeric M.D.I based system for producing rigid PIR foam with a nominal core density of 40kg/m<sup>3</sup> by injection/Pouring process. Grades, adjusted in reactivity, are available for both cold and hot condition.

### FIELDS OF APPLICATION

- PIR block manufacturing
- Pre insulated pipes

### 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 (Expiry – 6 months from production date)

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

- Viscosity @ 20°C is approx. 500 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.



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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 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. Polyol might store at room temperature (below 25°C.) in sealed drums. Close all drums after use to prevent absorption of moisture.

Safety goggles, impermeable protective gloves and overalls should always be worn when handling this product. Contaminated clothing should be removed immediately to prevent further skin contact.

### MIX RATIO

1 polyol : 1.4 MDI by weight.  
Typical reaction rate and density (laboratory, cup mix for both components at 20°C)

- Cream Time: 75 - 100 sec
- Gel Time: 170 - 200 sec.
- Free Rise Density: 37.5 – 39.0 kg/m<sup>3</sup>

\*Reactivity and density may vary depend on ambient temperature and grade

### SUPPLY

Polyfoam PIR-40BA	220Kg drum
Polyfoam MDI	250Kg drum

## TECHNICAL DETAILS

PROPERTIES	VALUES	STANDARDS
Mix Ratio, [PBW]	1:1.4	NA
Final Density, [Kg/m <sup>3</sup> ]	Approx.: 40	ASTM D 1622
Core Density, [Kg/m <sup>3</sup> ]	Approx.: 37	ASTM D 1622
Application Thickness, [cm]		
Min:	300	
Max:	500	
Compressive Strength, [Kpa]	> 100	ASTM D 1621
Thermal Conductivity @ 25°C, [W/mk]	0.023	ASTM C 518/19
Dimensional Stability [%]		
3 days @ - 20°C	< 2	ASTM D 2126
3 days @ + 25°C		
3 days @ +70°C [RH > 95%]		
Fire Resistance	B2 Class	DIN 4102

All values given are subject to 5-10% tolerance

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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

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