

Polyfoam SS-45

Two-component, spray-applied polyurethane foam system

Polyfoam SS 45 is a HCFC blown, polymeric MDI based system to produce rigid spray polyurethane foam.

CHARACTERISTICS

- ▶ Spray applied
- ▶ 43-48 Density

DESCRIPTION

Polyfoam SS 45 is a two-component, spray-applied polyurethane foam. Polyfoam SS 45 is an HCFC blown polymeric M.D.I based system for producing rigid urethane foam with a nominal applied density of 45 kg/m³ by spray process. The system may be applied to substrates where the surface temperature is of the order of 10 - 50°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, 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, hydrochlorofluorocarbon 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 vapor. 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 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.



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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

1:1 by volume.
 Typical reaction rate and density (laboratory, cup mix) (both components at 20°C)
 - Cream time: 3 - 6 sec.
 - Tack-free time: 7 - 9 sec.
 - Free rise density: 36 - 38 kg/m³
 Reactivity and density may vary depend on ambient temperature and grade.

SUPPLY

Polyfoam SS45	220kg drum
Polyfoam MDI	250kg drum

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	STANDARDS
Mix ratio, [volume:volume]	1:1	-
Applied density, [kg/m ³]	≥ 45	ASTM D 1622
Compressive strength, [Kpa]	≥ 276	ASTM D 1621
Thermal conductivity @ 25°C, [W/mk]	≤ 0.023	ASTM C 518
Closed cell content [%]	≥ 95	ASTM D 6226-21
Water vapor transmission, [perm-inch] all cut surfaces	2	ASTM C 518/91
Water absorption, per cm ² [gm/cc] without protective coating	0.0087	ASTM C 272
Dimensional stability, [%] @ - 20°C @ +25°C @ +70°C	Max 2.5 Max 2.5 Max 2.5	ASTM D 2126
Fire Behavior [mm]	Class B3	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.



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