

Product description

FLYPOLY CC 40 is a polyol system used in spray applications. The application rate is 1: 1 by volume. Thanks to its closed cell structure, it shows high thermal insulation performance even in thin applications. Polyol system does not contain ozone depleting CFC and HCFC blowing agents.

Intended use

Rigid, closed cell, polyurethane foam according to EN14315-1:2013.
Typical applications are thermal insulation of buildings, houses, industrial buildings, farm buildings, ship insulation, pipe insulation

Description of product's components

A-Component : FLYPOLY CC 40: contains polyether polyol, catalyst, blowing agent, silicone

B-Component : FLY PMDI : polymeric methylenediphenyldiisocyanate

Typical component properties

	Unit	FLYPOLY CC 40	FLY PMDI	Test Method
Density (21°C)	g/cm ³	1,10 – 1,18	1,20 – 1,25	DIN 51757
Viscosity (21°C)	mPa.s	380 - 490	210 - 250	ASTM D4878
NCO Content	%	---	30,5 – 31,0	ASTM 5155

Reactivity characteristics, mixed at 3000 rpm, 5°C

	Value	Unit	Test method
Cream time	5 – 7,5	s	EN14315-1, Annex E
Gel time	7 – 10,5	s	EN14315-1, Annex E
Tack free time	9 - 14	s	EN14315-1, Annex E
Free rise density	FRC : 33 – 38 FRB : 38 - 42	kg/m ³	EN1602 EN14315-1, Annex E



Declared performance				
	Value	Unit	Method	EN14315-1
Compressive strength	> 300	kPa	EN 826	CS(10\Y) 300
Durability of compressive strength	Does not decrease in time		EN 14315-1	
Closed cell content	> 90	%	ISO 4590	CCC4
Reaction to fire	E		EN 13501-1	E
Continuous glowing combustion	n.d.		No harmonized test method available	
Water absorption	< 0,2	kg/m ²	EN 1609, meth.B	W0,2
Thermal conductivity	See performance chart		EN 12667	

Processing

FLYPOLY CC 40 must be processed using designated two component spray machines only. These machines should have a mixing ratio of 100:100 in parts by volume.

The transport hoses should be set at a temperature of 30 – 50°C, depending on ambient conditions. It is necessary to use a component (mixing) pressure of at least 60 bar. Usually this requires a machine setting of 90 – 115 bar. Pressure difference between the two components should never exceed 15 bar.

FLYPOLY CC 40 can be applied in layers of max. 20 mm. Higher foam thicknesses should be obtained by applying multiple layers.

Before application the processor should check the condition of the substrate. Dust, water or grease should be removed prior to application. Take special care for dew formation of the substrate under certain climatic conditions. (dewpoint determination), dewpoint should be 3°C lower than substrate temperature. When in doubt test the adhesion of the foam onto the substrate. The substrate temperature should be at least 5°C.

Ambient and humidity can have a significant influence on the EN14315-1:2013 performance of the product.

Handling and storage

		FLYPOLY CC 40	FLY PMDI
Storage temperature	°C	15-25	15-25
Shelf life*	months	6	6

*Product components are sensitive to moisture. So they must be stored in the original sealed drums at storage temperature. Polyol component must be mixed before use.



Notice regarding safety and usage

Material Safety Data Sheet (MSDS) will be provided to you by FLY CHEM sales representative during the product supply. It is advisable to review this form before handling and use and also to check your own handling, safety and process conditions. It is necessary to dispose of the finished product drums according to MSDS. FLY CHEM commits protecting human health and the environment during the production conditions and customer conditions. So FLY CHEM is always ready to help its customers in this regard. Please contact to your FLY CHEM representative when you need help.



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The information provided herein is true and accurate to the best of our research, experience and knowledge. However, in the case of changes in the conditions and application methods, nothing in this bulletin is to be taken as a warranty, and previous trials are recommended. For further information and assistance, service is supplied by our technical staff and laboratories.

