

# PRODUCT DATA SHEET

B&B Delivering smart  
material technologies

Product  
name

## EKOSPRAY® HFO

Edition 2  
04.2020

CE-certified sprayed PU foam  
Thermal insulation for buildings  
DOP available, [ekospray@bangbonsomer.com](mailto:ekospray@bangbonsomer.com)



### Product description

<b>Developed for</b>	The thermal insulation of walls and attics with conventional spray machinery. Fully formulated polyol blend for spray application of closed cell rigid polyurethane foam
<b>Polyol</b>	Mixture of polyether polyols, flame retardants, activators, stabilizers, physical blowing agent HFO 1233zd
<b>Isocyanate</b>	Product based on Diphenylmethanediisocyanate (MDI)

### Typical properties

Liquid properties			Polyol	Isocyanate
	Density 25°C	g/cm <sup>3</sup>	ca. 1,19	ca. 1,23
Viscosity 25°C	mPas	ca. 400	ca. 200	

Formulation			Parts by volume	
	Polyol	EKOSPRAY® HFO	100	Parts by volume
Isocyanate	EKOSPRAY® ISO	100	Parts by volume	

Quality control Cup test	Material temperature	20 °C	
	<u>Cup weight</u>		
	Polyol	30 g	
	Isocyanate	31 g	
	<u>Parameter</u>		
	Cream time	ca.	4 sec
Gel time	ca.	8 sec	
Free rise cup density	ca.	37 kg/m <sup>3</sup>	

Physical properties (typical)	Core density	EN ISO 845	35 kg/m <sup>3</sup>
	Closed cell content	ISO 4590	96 %
	Compressive strength	EN ISO 844	240 kPa
	Reaction to fire	EN 13501-1	E class
		DIN 4102-1	B2 class
	Thermal conductivity	Initial at 10°C	0.021 W/m*K

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## Usage instruction

<b>Processing</b>	<p>To be used with a two-component high pressure-dosing machine, mix ratio 1:1 by volume</p> <p>Machine and hoses should be heated at 40-60 °C. Pressure at pump min. 65 bar. Pressure difference between A and B component not more than 15 bars.</p>
<b>Surface treatment</b>	<p>All substances that have a negative influence on foam quality or the adhesion like oil, grease or water have to be removed. Surfaces that provide low adhesion to the foam have to be treated with an adhesion promoter. The clean and dry surface should have a temperature of not less than 10°C. Lower temperatures or wet substrate surfaces may cause irregular cell size, poor dimensional stability and adhesion</p>
<b>Application of foam</b>	<p>Apply multiple individual layers of not more than 50mm to get the desired thickness. Between the consecutive layers allow for sufficient curing.</p>
<b>Safety</b>	<p>Wear appropriate protective clothing preferably with a self-contained breathing apparatus</p> <p>Please pay attention to the safety data sheet, it contains handling information.</p> <p>It is advisable to avoid direct skin contact with freshly produced polyurethane, because of the fact that in case of not covered polyurethane the surface may obtain traces of starting and successive products which are e.g. dangerous to health or have irritating, cauterizing and/or sensitizing properties.</p>

## Storage, packaging and supplying

<b>Storage</b>	<p>The packaging must be closed very well. This product is very sensible to moisture.</p> <p>The storage temperature is recommended at 25°C. Polyol should not be stored below 15°C and the isocyanate not below 20°C.</p> <p>The storage life is guaranteed for 6 months.</p>
<b>Packaging and Supplying</b>	<p>All products can be delivered in road tanker, IBC and drums.</p>

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## Changing to the last edition

<b>Changing</b>	04.2020
<b>First edition</b>	05.2019

## Disclaimer

**Remark**

The product information is made to the best of our believe, they are however not obligatory. This concerns also to trade mark rights of third parties. The product information mentioned above have to be proved additionally by an individual test of our products regarding the application for the intended processing of our purpose. The processing of our products and the products manufactured by the customer according to our technical support are out of our controlling possibilities and therefore subject to the responsibility of the customer.