

1. PRODUCT DESCRIPTION

EKOPRODUR 1112B2 is a two-component polyurethane system for production of semi-rigid foam with self-extinguishing properties.

POLY component (polyol mixture).	EKOPRODUR 1112B2 POLY
ISO component (isocyanate)	ISO KOMPONENT B

2. APPLICATION

EKOPRODUR 1112B2 is used for the production of insulation boards and panels in molds, as well as heat-insulating lagging.

3. COMPONENT CHARACTERISTICS

POLY COMPONENT - a formulated polyol mixture in the form of an oily liquid, colorless or yellow, without suspension.

ISO COMPONENT - a mixture of aromatic polyisocyanates, mainly diphenylmethane diisocyanate. Brown-colored liquid, without suspended solids.

Parameter	POLY	ISO	Unit
Density at 20°C	1,09 ± 0,02	1,22 ± 0,02	g/cm ³
Viscosity at 20°C	500 ± 100	350 ± 50	mPa·s

4. FOAMING CHARACTERISTICS UNDER LABORATORY CONDITIONS

The reaction times and apparent density of the core were measured under laboratory conditions (at 20°C) with hand foaming in a laboratory vessel - stirring about 5000 rpm, stirring time about 8 s.

Parameter	Value	Unit
POLY:ISO component mixing ratio by weight	100 : 124	
Cream time	11 ± 2	s
Gel time	42 ± 4	s
Tack free time	59 ± 10	s
Apparent core density	11 ± 1	kg/m ³

5. RECOMMENDED PROCESSING CONDITIONS

EKOPRODUR 1112B2 system can be processed manually or with low-pressure or high-pressure foaming machines.

POLY:ISO component mixing ratio by weight	100 : 124	
Recommended machine settings		
Parameter	Value	Unit
Raw material temperature	20 - 22	°C
Ambient temperature	18 - 25	°C
Cladding/mold temperature	30 - 40	°C

IMPORTANT: Mix component A for 10 - 15 minutes before use. The POLY component tends to separate slowly. The ISO component does not require mixing.

With aluminum or stainless steel cladding, it may be necessary to prepare the substrate mechanically or chemically to increase adhesion.

The density of the foam in the finished product should be no less than 18,5 kg/m³ (calculated as the ratio of the weight of the system in kg to the total volume of the mold in m³). The method of mixing and pouring the system into the mold should ensure equal filling.

Demolding time depends on the size of the molds and the temperature of the mold.

When processing the system, it is necessary to take into account the instructions and information contained in the Safety Data Sheets of the components.

6. FOAM PROPERTIES

The following results were obtained for the finished insulation product obtained from EKOPRODUR 1112B2 system by the in-mold pouring method:

Parameter	Value	Unit	Standard
Apparent core density	≥ 18,5	kg/m ³	PN-EN 1602:2013-07
Fire classification	E	-	PN-EN 13501-1+A1:2010
Short-term water absorption when partially immersion, W _P	≤ 1,8	kg/m ²	PN-EN 1609:2013
Thermal conductivity coefficient λ _{mean, i}	0,038	W/(m·K)	PN-EN 12667:2002
Compressive stress at 10% relative strain σ ₁₀	≥ 60 kPa	kPa	PN-EN 826:2013-07
Temperature stability: 110°C, after 24 h	DS(110,-) 3*	%	PN-EN 1604:2013-07
Temperature stability: -30°C, after 48 h	DS(-30,-) 3*	%	PN-EN 1604:2013-07

*Classification according to harmonised standard EN 14308+A1.

The foam acquires its full mechanical properties after seasoning for 48 hours.

7. PACKAGING

Metal drums of 216 dm capacity³, IBC container of 1000 dm capacity³. It is possible to deliver in other packaging agreed with the recipient.

8. RECOMMENDED STORAGE AND TRANSPORT CONDITIONS

Both components of the system should be stored in tightly closed packages in dry rooms with a temperature of 5 - 25°C. Protect from moisture and direct sunlight. Shelf life of the component POLY in original sealed manufacturer's packaging, stored in recommended conditions, is **3 MONTHS** from the date of production. For special shipments, please contact directly with the relevant person in the logistics department for correct selection (different requirements to the packaging).

9. REGULATIONS AND CERTIFICATIONS

- EKOPRODUR 1112B2 does not contain ozone-depleting foaming agents, in accordance with the European Union regulations on the marketing and use of controlled substances - Regulation (EU) No. 2024/590 of February 7, 2024.
- The product has a hygienic certificate PZH (*Państwowy Zakład Higieny*).
- Transport regulations apply in accordance with section 14 of the Product Safety Data Sheet.

10. ADDITIONAL INFORMATION

Please refer to the data sheet for both components of the system. The data contained in this technical information are based on the results of our laboratory tests and practical experience and do not constitute a guarantee of the properties of the final finished product. The results obtained may differ from those given when the product is used under conditions other than those assumed. Therefore, we recommend that you conduct your own tests to verify the suitability of the product for a given application. The use of the foam and the conditions of its application are not controlled by the manufacturer, the responsibility for their correct selection rests with the contractor. Guidelines for use of the system are contained in this document and in the Safety Data Sheets (SDS) of the individual components. Failure to comply with the conditions recommended by the manufacturer may adversely affect the processing of the system and the parameters of the finished product.

IMPORTANT: We are happy to provide technical and substantive assistance in the implementation and application of EKOPRODUR 1112B2 polyurethane system. At the same time, when necessary, we assist in the adjustment and selection of relevant parameters. For all matters related to the purchase and application of EKOPRODUR 1112B2 polyurethane system, we encourage you to contact your technical and sales representative directly or by writing to prodex@pcc.eu.