

**Technical Data Sheet**

EN

**PUREX NG 0440 NS**
**Issue date** 03.10.2019  
**Revision date** 20.02.2023

**Product description**

Two-component rigid polyurethane foam for the production of thermal insulation by spraying on specialized high-pressure equipment.

Especially recommended for thermal insulation and sealing of flat roofs, foundations and floors and ceilings.

It contains a modern blowing agent type HFO with zero ozone depletion potential ODP = 0 and very low global warming potential (GWP).

<b>The product has got Type Acceptance Certificate given by Bureau Veritas. Certificate No.:</b>	<b>13792/D0 BV</b>
<b>The product marketed in accordance with Regulation (EU) No 305/2011, with the assessment of the performance made in accordance with the European harmonized standard</b>	<b>EN 14315-1:2013 + NB-CPR/SG19-17/167r2</b>

**The product has CE marking and Declaration of Performance has been issued for it.**

**The foam has to be protected with UV radiation resisted layer.**

Two components:	Component A	Component B
Component name	PUREX NG 0440 NS A	PUREX NG B
State of aggregation	liquid	liquid
Colour	dark green to brown	brown
Viscosity at 25°C [mPas]	700 ± 150	150 - 250
Density at 25°C [g/cm <sup>3</sup> ]	1,15 ± 0,02	1,23 ± 0,01

**Application method recommended**

Component A should be thoroughly mixed before use.

Detailed warnings and recommendations for the system processing are given in the Application Instruction of the system.

The system application should be made using specialist foaming unit provided with spraying head. The unit and parameters (heaters and hoses temperatures, operating pressure) set have to enable of reaction mixture good intermixing and uniform spraying. The sprayed surface should be completely dry and degreased.

Recommended single layer of the foam thickness [mm]	5 - 20
Recommended time between spraying of the following layers [min]	5 - 10
The material final properties after [h]	24
Raw materials temperature at the head inlet recommended [°C]	40 - 45
Ambient temperature during application [°C]	15 - 30
Recommended temperature of the sprayed surface [°C]	15 - 40
Minimum sprayed surface temperature [°C]	5

**Technological properties\***

Component A:B ratio - by weight	100 : 107
Component A:B ratio - by volume	100 : 100
Raw materials temperature [°C]	20

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Cream time [s]	6 - 9
Tack-free time [s]	18 - 25
Free rise density [kg/m <sup>3</sup> ]	40 - 45

### Physical and mechanical product properties\*

Minimum density of the foam core in the product acc. to EN 1602 [kg/m <sup>3</sup> ]	50
Compression strength at 10% deformation acc. to EN 826 [kPa]	≥ 300
Tensile strength acc. to EN 1607 [kPa]	≥ 400
Initial thermal conductivity at 10°C acc. to EN 12667 [W/mK]	0,0215
Maximum application temperature [°C]	80
Minimum application temperature [°C]	-30
Closed-cell content acc. to EN ISO 4590	≥ 90%
Short-term water absorption by partial immersion acc. to EN 1609 (foam without skin) [kg/m <sup>2</sup> ]	≤ 0,15
Coefficient of water vapor diffusion resistance $\mu$ acc. to EN 12086	55 - 75
Dimensional stability acc. to EN 1604 (at 80°C, 10% relative humidity) maximum deformation after 48h	≤ 3%
Dimensional stability acc. to EN 1604 (at 70°C, 90% relative humidity) maximum deformation after 48h	≤ 5%
Class of reaction to fire acc. to EN 13501-1	E
Class of reaction to fire acc. to DIN 4102	B2

### Transport and storage

Store in dry, well ventilated room, in tightly closed containers. Protect against moisture access and direct exposure to sunrays. Store away from heat sources, in the container originally packaged in a vertical position.

The products should be transported in tightly closed containers.

Permissible temperature during transport [°C] 5 - 25

Recommended storage temperature [°C] 15 - 25

Storage life for component A from manufacture date, if stored in recommended conditions and in original containers: **3 months**

Storage life for component B from manufacture date, if stored in recommended conditions and in original containers: **6 months**

### \*Notes

Data presented in this information have been obtained during the system foaming in model conditions. The results obtained when foaming in other conditions can be slightly different from published.

The viscosity test was performed according to the internal procedure.

The system application instruction is available if requested. Polychem Systems company offers its assistance at the system implementation and application in client's manufacture.

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Every time the user is obliged to check the product and auxiliary agents usefulness for his intentional use.

The user is obligated to have a valid technical data sheet and safety data sheet of the product, which is provided by the manufacturer during the sale and every time on the customer's request.

Prior to processing the user must carefully read aforementioned documentation and follow the rules of procedure for product use.