

**Technical Data Sheet**

EN

**PUREX NG 0428 NS**

<b>Issue date</b>	02.09.2019
<b>Revision date</b>	25.03.2024

**Product description**

Two-component system for the production of rigid polyurethane spray foam.

Especially recommended for insulating and sealing the surface of ceilings and walls both inside and outside the isolated area. It can be used for insulation of industrial halls and warehouses, sheds, and cold storage of food products and others.

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

**The foam is resistant to mould growth - ITB approval no. 02674/23/Z00NZM.**

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

**Institut Techniki Budowlanej has assessed the emissions of volatile organic compounds from the foam to the indoor air. The assessment found that the product meets the requirements of the Regulation of the Minister of Health and Social Welfare on the permissible concentrations and intensities of factors harmful to health, emitted by building materials, devices and equipment in rooms intended for people. These requirements are met for rooms of all categories.**

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

Two components:	Component A	Component B
State of aggregation	liquid	liquid
Colour	dark green to brown	brown
Viscosity at 25°C [mPas]	400 ± 150	150 - 250
Density at 25°C [g/cm <sup>3</sup> ]	1,16 ± 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]	20 - 60
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 - 50
Ambient temperature during application [°C]	15 - 30
Recommended temperature of the sprayed surface [°C]	15 - 40
Minimum sprayed surface temperature [°C]	5

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### Technological properties\*

Component A:B ratio - by weight	100 : 106
Component A:B ratio - by volume	100 : 100
Raw materials temperature [°C]	20
Cream time [s]	4 - 7
Tack-free time [s]	11 - 17
Free rise density [kg/m <sup>3</sup> ]	28 - 32

### Physical and mechanical product properties\*

Minimum density of the foam core in the product acc. to EN 1602 [kg/m <sup>3</sup> ]	32
Compression strength at 10% deformation acc. to EN 826 [kPa]	≥ 150
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> ]	≤ 0,14
Coefficient of water vapor diffusion resistance $\mu$ acc. to EN 12086	50 - 60
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.

Containers opened before should be tightly closed and stored in position making out-flow impossible.

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:	<b>3 months</b>
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Storage life for component B from manufacture date, if stored in recommended conditions and in original containers:	<b>6 months</b>
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### \*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.

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

**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.**

**As from 24 August 2023 adequate training is required before industrial or professional use.**