



## TECHNICAL DATA SHEET

# NORDIC LIGHT 8 ELITE

**Issue date** 15.11.2023  
**Revision date** 15.11.2023

### Product description

Two-component system for making semi-rigid open-cell polyurethane foam applied by spraying.

It contains no CFC, HCFC and HFC.

It is recommended for thermal and sound insulation making in spraying process using specialist high-pressure devices.

The product obtained can be used as wall, ceiling and floor insulation, and also as loft or garret insulation.

In consideration of its open-cell structure the system has to be used in the way providing the insulation made is not exposed to long-lasting mechanical stresses, moisturizing, steam condensation and weather conditions influence during exploitation.

It is also necessary to provide suitable thermal and anti-ignition barriers assembly (12 mm gypsum boards, for example), that can separate insulation from the building interior; fire-control requirements are then fulfilled.

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 **EN 14315-1:2013**

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.

Component name	NORDIC LIGHT 8 ELITE	NORDIC MDI
State of aggregation	liquid	liquid
Colour		
Viscosity at 25°C [mPas]	milky brown (after mixing)	brown
Density at 25°C [g/cm <sup>3</sup> ]	1300 ± 300	150 - 250
	1,11 ± 0,02	1,23 ± 0,01

### Application method recommended

Before using NORDIC LIGHT 8 ELITE (polyol) of the system must be thoroughly stirred with a mechanical stirrer.

Before using NORDIC LIGHT 8 ELITE (polyol) of the system must be thoroughly stirred (approx. 1 hour stirring for the drum V200) – it is also recommended to recalculate through the hoses of spraying machine. It is recommended to stir the polyol also during spraying. Inadequate quality of foam means it is necessary to interrupt spraying and re-stirring of the contents of drum with the NORDIC LIGHT 8 ELITE.

NOTE: The long-term processing insufficiently mixed polyol component will result in irreversible loss of its properties.

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



## TECHNICAL DATA SHEET

### NORDIC LIGHT 8 ELITE

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.

For some coated plastic surface must be prepared in order to obtain a good adhesion of the coating.

The material final properties after [h]	24
Raw materials temperature at the head inlet recommended [°C]	50 - 60
Ambient temperature during application [°C]	5 - 30
Recommended temperature of the sprayed surface [°C]	5 - 40

#### Technological properties\*

NORDIC LIGHT 8 ELITE : NORDIC MDI ratio - by weight	100 : 110
NORDIC LIGHT 8 ELITE : NORDIC MDI ratio - by volume	100 : 100
Raw materials temperature [°C]	20
Cream time [s]	4 - 6
Tack-free time [s]	8 - 13
Free rise density [kg/m <sup>3</sup> ]	7 - 8

#### Physical and mechanical product properties\*

Density of the foam core in the product acc. to EN 1602 [kg/m <sup>3</sup> ]	7 - 9
Thermal conductivity at 10°C - mean value [W/mK]	0,037
Thermal conductivity at 10°C - declared value [W/mK]	0,038
Maximum application temperature [°C]	100
Short-term water absorption by partial immersion acc. to EN 1609 (foam without skin) [kg/m <sup>2</sup> ]	≤ 0,26
Coefficient of water vapor diffusion resistance $\mu$ acc. to EN 12086	3 - 4
Dimensional stability acc. to EN 1604 (at 80°C, 10% relative humidity) maximum deformation after 48h	≤ 1,5%
Dimensional stability acc. to EN 1604 (at 70°C, 90% relative humidity) maximum deformation after 48h	≤ 3%
Weighted sound absorption coefficient $\alpha_w$ acc. to EN ISO 11654	0,50 (LH)
Sound absorption class acc. to EN ISO 11654	D
Sound absorption rating acc. to VDI 3755/2000	absorptive
Class of reaction to fire acc. to EN 13501-1	E
Class of reaction to fire acc. to DIN 4102	B2



## TECHNICAL DATA SHEET

### NORDIC LIGHT 8 ELITE

#### 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] Recommended	5 - 25
storage temperature [°C]	15 - 25
Storage life from manufacture date, if stored in recommended conditions and in original containers:	<b>6 months</b>

#### \*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.

**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.**

#### Annex

##### Sound-absorbing properties acc. to EN ISO 11654

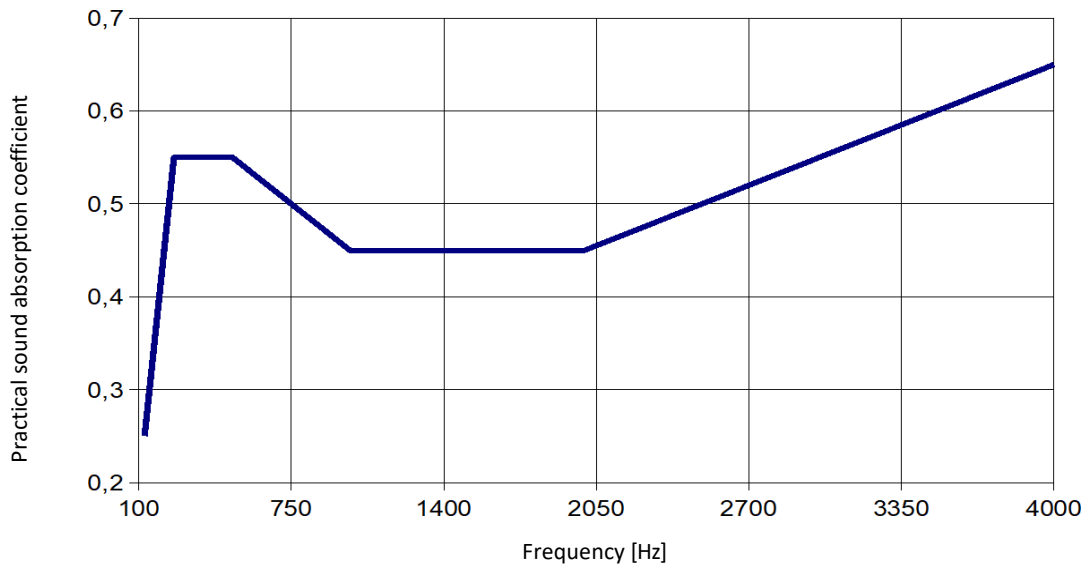
Measurements were made for the foam sprayed in two layers with a total thickness of 18 cm.

Frequency [Hz]	Practical sound absorption coefficient $\alpha_p$
125	0,25
250	0,55
500	0,55
1000	0,45
2000	0,45
4000	0,65



**TECHNICAL DATA SHEET**

**NORDIC LIGHT 8 ELITE**



Weighted sound absorption coefficient  $\alpha_w = 0,50$  (LH)

Product class: D

Description acc. to VDI 3755/2000: „absorptive”