



Quality insulation
with a personal touch

TECHNICAL DATASHEET NESTAAN® POLYURETHANE SYSTEMS



NESTAAN® PQ012/45

| | |
|-----------------------------|---|
| Components | A-Component: NESTAAN® POLY PQ012/45 B-Component: NESTAAN® ISO 30 |
| Material description | 2 component PIR pouring foam system. This system contains new generation blowing agents (HFO). |
| Application | NESTAAN® PQ012/45 is a two component PIR foam system with improved flow ability. |
| Application areas | Industrial insulation of tanks, pipe insulations etc. |

| Product properties | | | |
|---------------------|-------------|-------------|-------|
| | A-Component | B-Component | Unit |
| Specific mass 20°C | 1170 – 1210 | 1210 – 1250 | g/l |
| Viscosity 20°C | 600 - 1000 | 150 - 250 | mPa.s |
| Mixing ratio | | | |
| Parts by weight | 100 | 104 | |
| Parts by volume | 100 | 100 | |

| Typical foaming properties (handmix, 20°C, 3000 rpm) | | | |
|--|-----------------|----------|-------------------|
| | | Value | Unit |
| Reactivity | Cream time (CT) | 30 ± 4 | s |
| | Gel time (GT) | 125 ± 12 | s |
| Density | Core density | 45 ± 5 | kg/m ³ |

| Packaging | |
|--|-------------------|
| NESTAAN® POLY PQ012/45 can be supplied in | |
| Plastic cans | 30 kg nett |
| Metal drums | 60 or 225 kg nett |
| IBC's | 1125 kg nett |
| Bulk | 23000 kg nett |
| NESTAAN® ISO 30 can be supplied in | |
| Plastic cans | 30 kg nett |
| Metal drums | 60 of 250 kg nett |
| IBC's | 1250 kg nett |
| Bulk | 23000 kg |

| Shelf life and storage | | | |
|---|-------------|-------------|--------|
| | A-Component | B-Component | Unit |
| Storage temperature | 5 - 30 | 5 - 30 | °C |
| Shelf life (in closed, sealed packaging) | 3 | 6 | months |



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Processing

This system can be used for all kinds of panels and other objects where a great flow is demanded. NESTAAN® PQ012/45 shows a good adhesion to most common facings, but the temperature of all parts in contact with the reacting foam should be at least 40°C to prevent delamination of the facings. Some facing materials like aluminum or stainless steel should be grinded or be treated with an adhesion promoting coating. In case of doubt the adhesion should be tested on the facing or equivalent materials. As a general rule the demoulding time is appr. 3 minutes per cm. thickness of the foam. This should be tested during production trials.

Typical foam properties

| | Value | Unit | Method |
|--|-------------------------------------|-------------------|-------------------------|
| Density | 45 - 55 | kg/m ³ | EN 1602 |
| Thermal conductivity 10°C (λi) | < 0,026 | W/m.K | EN12667 |
| Closed cell content | ≥ 90 | % | ISO 4590 |
| Compressive strength | ≥ 300 | kPa | EN 826 |
| Dimensional stability 70°C/90% RV, 48 h. – lengte+breedte / dikte -20°C, 48 h. – lengte+breedte / dikte | ≤ 6 / ≤ 2 ≤ 2 / ≤ 0,5 | % % | EN1604 |
| Fire behaviour Euroclass Baustoffklasse | E B2 (B1 behind steel facing) | | EN13501-1 DIN 4102-1 |
| Water absorptie | ≤ 0,5 | kg/m ² | EN 1609 |

Above mentioned values are measured on typical production samples, they are not a sales specification.

*Note: The fire performance values stated in this document are not intended to assess the hazards of this or any other material during actual fires.

Remarks

All our products must be processed by competent persons. In case of doubt you must contact us. The fire risk must be taken into account when processing polyurethane. All necessary measures must be taken to prevent firing. Suitable fire extinguishers must also be present in the immediate vicinity.

Our recommendations with regard to technical application, whether verbal, in writing or by means of tests have been drawn up to the best of our knowledge and understanding, but are intended as indicative only, also in relation to any third party entitlements. They do not discharge you of your obligation to check products delivered by us for their suitability for the intended procedures and purposes.

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