Technical Product Data Sheet

KERAFIX®
Everseal NG-N Granulat

kuhn rodice

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Product description

KERAFIX® Everseal NG-N Granulat is a high-quality technical plastic granulate based on expandable graphite that forms a pressure-resistant foam body when exposed to heat.

This granulate is available in the quality grades L (low), H (high) and P (power), which each offer different expansion rates:

L quality expands to 6.9 to 16.3 times its original volume

H quality expands to 9.8 to 21.6 times its original volume

P quality expands to 11.6 to 22.7 times its original volume

The reaction begins at around 175 °C, and the products are halogen-free and largely moisture-resistant.

These properties make the granulate ideal as a starting material for injection moulded parts in applications such as electrical installations (fire protection cavity wall boxes), fire-rated distributor systems, penetration seals in fire protection ceilings, fire protection doors and safety storage cabinets.

Reaction to fire

- Class E (DIN EN 13501-1)

Properties

- High expansion rate
- Reliable fire protection
- Has a wide range of uses
- Easy to install

Field of application

- KERAFIX® Everseal NG-N Granulat is used as a starting material for injection moulded parts and profile gaskets that expand in the event of fire.

Technical data

Verification	ETA-17/0978
Composition	Expandable graphite and TPE-based foaming material that is free from halogens, asbestos and conflict minerals. Compliant with REACH, RoHS and VOC and UV-resistant
Material structure	Granulate
Volatile components (VOC) [g/l]	None
Thermal conductivity [W/(m×K)]	0.255
Thermal conductivity reference temp. [°C]	10
Dynamic pressure [bar]	10 – 50
Start of reaction [°C]	175
Expansion rate [x times]	NG-N L: 7 – 16 NG-N H: 10 – 22 NG-N P: 12 – 23
Reference expansion rate	450 °C – 30 min. – without superimposed load
Intumescent layer	Solid, stable material
Expansion pressure [N/mm²]	NG-N L: 0.209 – 0.671 NG-N H: 0.463 – 0.816 NG-N P: 0.50 – 0.90
Reference expansion pressure	300 °C – method 4
Pre-drying [h]	4 hours at 50 °C

KERAFIX® Everseal NG-N L (Low)

Property		Mean
Melt index DIN EN ISO 1133-1 130 °C / 2.16 kg	MFR [g/10 min.]	0.13
	MVR [cm³/10 min.]	0.14
Melt index DIN EN ISO 1133-1 130 °C / 21.6 kg	MFR [g/10 min.]	12.5
	MVR [cm³/10 min.]	11.5

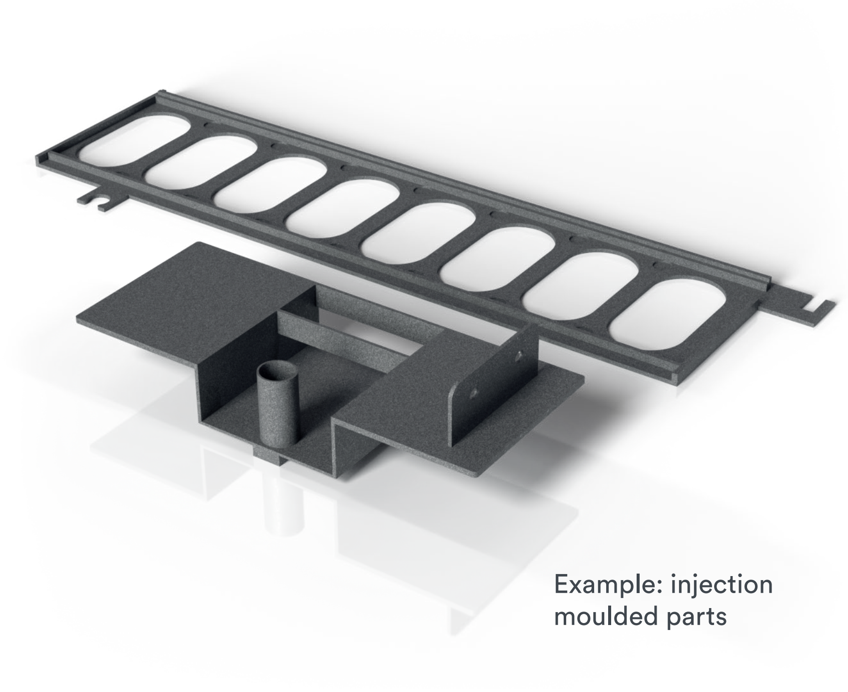
Processing information

Mould temperature [°C]	20 – 40
Injection pressure [bar]	400 – 1000

1. Preparation:
   - Before working with the material, it must be brought to a constant temperature to stabilise its properties during the moulding process.
2. Processing temperature and injection parameters:
   - The melting temperature is approximately 130 °C.
   - Injection pressure: 400 – 1000 bar.
   - Mould temperature: 20 – 40 °C.
   - To ensure reliable performance, we recommend pre-drying the granulate: 4 hours at 50 °C.
3. Safety notes:
   - Refer to the safety data sheet prior to application. Wear protective equipment such as gloves and safety masks to minimise contact with dust and particles.
   - The expandable graphite component may cause abrasion and wear during processing.

Content of a package/set

In 500 kg octabin or at the customer's request.
Please note that the use of our granulate may cause wear due to abrasion.



Example: injection moulded parts

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