

Technical Data Sheet

KEG-2003H-40A/B

Liquid silicone rubber

Standard - LowDn

KEG-2003H-40A/B is a fast cure liquid silicone rubber for injection molding. It is supplied as two components which are mixed in a 1:1 ratio. Colour paste may be added if required. The thixotropic viscosity of KEG-2003H-40A/B is low enough to allow easy pumping by common injection molding systems. Depending on the specific requirements, KEG-2003H-40A/B can help to reduce costs of postcuring significantly due to low volatile content.

Features & Advantages

- excellent mechanical properties (npc)
- fast curing
- good transparency
- low content of volatile cyclics (Dn)
- easily colourable
- no flash tendency
- excellent material flow properties
- in accordance with EN 14350 "Volatile compounds content" (npc)

Characteristics	Unit	KEG-2003H-40-A	KEG-2003H-40-B	Standard method / condition
		Uncured property at 23°C		
Viscosity	Pa·s	940	970	Rotational viscometer; 0,9 s ⁻¹
Viscosity	Pa·s	330	270	Rotational viscometer; 10 s ⁻¹
Appearance		Translucent		
Pot life	h	>72		23°C
Curing speed T10	sec.	22		JIS K 6300-2, MDR, 130°C
Curing speed T90	sec.	43		JIS K 6300-2, MDR, 130°C
		press cure 5 min / 150°C		
		NPC		NPC = non-postcured
Density	g/cm ³	1,13		JIS K 7112, 23°C
Hardness	ShA	42		JIS K 6253
Tensile strength	MPa	9,3		JIS K 6251
Tear resistance	kN/m	35		JIS K 6252
Elongation at break	%	780		JIS K 6251
Linear shrinkage	%	2.0		

A comparison of JIS standards with DIN and ISO standards is available upon request.

(Note: above values are not specifications, but just typical values)

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Processing

The components A and B are ready to use products. The mixture of component A and component B in the ratio 1:1 is injected into the heated mold (temperatures around 180 °C).

The injected silicone mixture vulcanizes within seconds to the final required shape depending on the thickness. KEG-2003H-40A/B is suitable for the production of high quantities, especially when good demolding properties and a short curing time are required.

The excellent processing consistency allows a stable high productivity utilizing short cycle times.

Postcuring: It depends on the application if postcuring is required. Postcuring might lower the dynamic stress resistancy. Tests in realistic circumstances need to be done in advance to determine the necessity of postcure.

Packaging

Drum and pail are both available for KEG-2003H-40A/B

Net weight	Component A	Component B
20 liter pail (plastic blue coloured)	20 kg	20 kg
200 liter drum	200 kg (white coloured drum)	200 kg (blue coloured drum)

Storage and guarantee term

When stored in its original unopened packaging, at a temperature of less than 25°C, KEG-2003H-40A and KEG-2003H-40B can be stored for 18 months after the production.

Storage after this period does not mean that the product cannot be used anymore, provided the cured parts can pass the quality inspection.

Safety

Not hazardous according to EU Directive 1999/45/EC.
Please consult our MSDS.

Warning to users

The data and information presented may not be relied upon to present standard values. Shin-Etsu reserves the right to change such data and information without notice. Users are solely responsible for making preliminary tests to determine the suitability of products for their intended use.

Statements concerning possible or suggested uses made herein may not be relied upon, or be construed, as a guarantee of no patent infringement.

The silicone products described herein have been designed, manufactured and developed solely for general industrial use only; such silicone products are not designed for, intended for use as, or suitable for, medical, surgical or other particular purpose.

Users have the sole responsibility and obligation to determine the suitability of the silicone products described herein for any application, to make preliminary tests, and to confirm the safety of such products for their use.

Users must never use the silicone products described herein for the purpose of implantation into the human body and / or injection into humans.

Users are solely responsible for exporting or importing the silicone products described herein, and complying with all applicable laws, regulations, and rules relating to the use of such products.

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