

SILPURAN® 6000/20 A/B

HIGH PURITY LIQUID SILICONE RUBBER FOR HEALTH CARE APPLICATIONS

Product description

Liquid silicone rubber of the SILPURAN[®] 6000 series is a paste-like, easily-pigmentable two-component compound with short curing times. The vulcanizate is noted for its high transparency and excellent mechanical and electrical properties.

Properties

SILPURAN® 6000/20 A/B meets selected test requirements of ISO 10993 and United States Pharmacopoeia (USP) Class VI. The results of the biocompatibility tests are shown in the table "Biocompatibility test data".

Postcured parts can be used for food contact applications and are suitable for use under the Recommendation "XV. Silicones" of the BfR and FDA § 177.2600 under observance of any given limitations on extractable and volatile substances.

Special features

A master file has been filed with the U.S. Food and Drug Administration. An authorization to reference the master file will be available upon request.

Application

SILPURAN® 6000/20 A/B is particularly suitable for the economical production of large series of injectionmoulded articles.

SILPURAN® 6000/20 A/B is designed for medical and

pharmaceutical applications including implantation for < 30 days.

Processing

SILPURAN® 6000/20 A/B is delivered in a ready to use two-component kit (A and B component). With standard metering equipment the A and B components can be pumped directly from the original containers via a static mixer into the injection molding machine. The mixing ratio is 1 : 1.

At room temperature mixtures of A and B components have a pot life of at least three days.

Storage

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.



Product data

| Typical general characteristics | Inspection Method | Value |
|--|---------------------|------------------------|
| Hardness Shore A | DIN 53505 | 20 |
| Appearance | | transparent |
| Density | DIN EN ISO 1183-1 A | 1,08 g/cm ³ |
| Viscosity (shear rate 1 s ⁻¹) | DIN 53019 | 290000 mPa s |
| Viscosity (shear rate 10 s ⁻¹) | DIN 53019 | 190000 mPa s |
| Tensile strength | DIN 53504 S 1 | 8,00 N/mm ² |
| Elongation at break | DIN 53504 S 1 | 850 % |
| Tear strength | ASTM D 624 B | 25 N/mm |
| Compression set *) | DIN ISO 815-B | 17 % |
| | (22 h / 175 °C) | |

Cure conditions: 5 min / 165 °C in press; postcuring for 4 h / 200 °C in ventilated air

*) Cure conditions: 5 min / 165 °C in press, postcuring for 6 h / 200 °C in ventilated air.

These figures are only intended as a guide and should not be used in preparing specifications.

Biocompatibility test data of SILPURAN[®] 6000

| Test | Test method | Test results |
|---|--|---|
| USP Class VI | | |
| systemic toxicity intracuteaneous toxicity | test of extractables from the elastomer in 0.9% saline, ethanol in 0.9% saline, PEG 400 diluted with cotton seed oil; extraction at 121 °C | no irritant or adverse systemic effects relative to controls |
| implantation test | implant of elastomer strips (120 h) | no local tissue effects relative to controls |
| ISO 10993-5 | | |
| Cytotoxicity | test of extractables from elastomer in cell culture medium (DMEM) | no cytotoxic effect |
| ISO 10993-10 | | |
| Sensitisation LLNA | test of extractables from elastomer in acetone/olive oil | no sensitisation |
| ISO 10993-11 (USP 25) | | |
| Pyrogenicity | test of extractables from the elastomer in 0.9% saline | no pyrogenicity |

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose. The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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Wacker Chemie AG Hanns-Seidel-Platz 4 81737 München, Germany info.silicones@wacker.com

www.wacker.com