HygienicSeal

Vi 602 – ideal for uses in the food, cosmetics and pharmaceutical industries

There are particular requirements which need to be met for the use of precision O-rings in the pharmaceutical, food and cosmetics industries. The FEPM material HygienicSeal Vi 602 has two of the most important approvals for these areas: it passes the clearance test for harmless products according to FDA 21 CFR Section 177.2600 and has been given a release certificate in accordance with USP Class VI, Chapter 88. In the USP test the material was successfully tested in the highest class up to +121 °C. It is an entirely reliable material with an extremely wide range of uses in critical areas.

The high-performance FEPM compound Vi 602 has also been designed especially for use with liquid or fatty media. Unlike EPDM materials, this special material also shows its strengths when used with animal and vegetable fats (fat content ≥ 30%) such as creams, oils, ointments and lotions. The compound HygienicSeal Vi 602 is also resistant to flavourings and essential oils. The operating temperature range is between -10 °C and +230 °C. This material has also been successfully tested in CIP/SIP processes. It therefore provides greatest possible flexibility with many different production processes, making it the first choice for many designers for use in the food, cosmetics and pharmaceutical industries.

Properties of Vi 602

- **High-performance FEPM material**
- **In some areas comparable with FFKM but much less expensive**
- **Operating temperature range: -10 °C to +230 °C**
- **Excellent resistance in CIP/SIP processes**
- **Resistant to flavourings**
- **Release certificate in accordance with FDA and USP Class VI**
- **WFI water tested**

COG

When it matters …

Premium quality since 1867

HygienicSeal Vi 602 – all-rounder for use in the food, cosmetics and pharmaceutical industries

To meet the exceptionally high requirements of the food, cosmetics and pharmaceutical industries, COG has developed its HygienicSeal product line – the seal of quality and safety. Conventional O-ring materials cannot be used in these applications because the corresponding stipulated approvals are missing. The seals used here also have to resist the interactions occurring in the production process without any problems. The cleaning cycles in the SIP* or CIP** processes and the aggressive WFI water often used in the pharmaceutical industry in particular place the highest requirements on the seals which are used. Many of the seals used fail here entirely or can remain without leaks only for short periods. The FEPM sealing material HygienicSeal Vi 602 is also extremely well suited for use in fatty media and is far superior to an EPDM material here. In certain areas of application even the sealing performance of FFKM seals is achieved and sometimes exceeded with this high-performance material. This means ideal requirements are met for use in particularly demanding applications.

SIP tested

CIP tested

WFI tested

   * **SIP** = *Sterilisation in place*
  ** **CIP** = *Cleaning in place*
 *** **WFI** = *Water for Injection*

Material data

COG-No.:	Vi 602
Basic elastomer:	Viton® Extreme-ETP (FEPM)
Colour:	Black
Operating temperature:	From -10 °C to +230 °C
Certificates/approvals:	FDA § 177.2600, USP Class VI – 121 °C,

Rubber technology data

Properties	Unit	Value	Test method
Hardness:	Shore A	75 ± 5	DIN 53 505
	°IRHD, CM	75 +3/-8	DIN ISO 48
Tension at 100 %:	N/mm²	4	DIN 53 504
Tear resistance:	N/mm²	17	DIN 53 504
Ultimate elongation:	%	280	DIN 53 504
Tear growth resistance:	kN/m	14	DIN ISO 34-1, B (a)
Compression set (22 h/200 °C)	%	33	DIN ISO 815

The indicated values do not replace the official data sheet. They are not binding and exclude all liability for damage of any kind.

VITON® is a registered trademark of DuPont Performance Elastomers.

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