



AP 306 – the high-performance material for high-performance industries

Complex uses demand special solutions. The compound AP 306 satisfies the extreme requirements of hygienic design that apply in the food and pharmaceutical industry, medical technology and biotechnology. The dry EPDM material from the COG HygienicSeal series wins you over with all significant regulatory approvals, low migration values and low volume swell characteristics. AP 306 has been designed for use in sensitive production processes, in which contamination from microorganisms or other materials that need to be sealed must definitely be prevented.

As well as the report of certification according to FDA 21. CFR 177.2600 and 3-A Sanitary Standard 18-03, AP 306 is approved according to USP class VI in chapter 87 and chapter 88. The high-performance material was hereby tested up to +121 °C. AP 306 may be used in WFI water and in media with a fat content of up to 30 %. Additionally, the compound demonstrates high resistance when in contact with CIP/SIP media, and even the cytotoxicity test (according to ISO 10993-5:2009) was passed successfully by the COG material. The operating temperature ranges from -40 °C to +150 °C and makes AP 306 a flexible size for highly sensitive production processes.



Properties of AP 306

- EPDM terpolymer, peroxide cured
- Minimal traces of volatile constituents / lowest extraction value
- Unplasticised
- Material hardness: 75 +/- 5 Shore A
- Operating temperature range: -40 °C to +150 °C
- Compression set: 18 %
- Certified according to USP Class VI to +121 °C, Chapter 87 and Chapter 88
- Approvals according to FDA, 3-A Sanitary Standard 18-03 and ISO 10993-5:2009 (cytotoxicity test)
- Excellent resistance to CIP and SIP procedures (Cleaning In Place and Sterilisation In Place)
- Suitable for use with WFI water



HygienicSeal AP 306 – for use in CIP and SIP procedures

Increased requirements are placed on seals in the food and pharmaceutical industry, as well as in medical technology and biotechnology. Interactions in the production process, cleaning cycles in the CIP or SIP procedures and aggressive WFI water put the highest demands on the seals used. Conventional o-ring materials do not fulfil these demands and the approvals and quality certificates prescribed by law are lacking.

For this reason, COG developed the „HygienicSeal“ product line - which is now acknowledged by the industry as a sign of safety. The high-performance materials have all the necessary certifications and approvals. AP 306 also inspires confidence with a hardness of only 75 Shore A, yet simultaneously a low compression set of 18 % (24 h / 100 °C). The long period of service measurably demonstrates the quality in use here.



DATA-SHEET

COG-No.:	AP 306
Basic elastomere:	Ethylene-propylene-diene rubber (EPDM)
Colour:	black
Temperature range (air):	from -40 °C to +150 °C
Approvals / Certifications:	FDA 21. CFR 177.2600, USP Class VI to +121 °C, Chapter 87 and Chapter 88, ISO 10993-5:2009 (cytotoxicity test), 3-A Sanitary Standard 18-03, Class 2

Rubber technology data

Properties	Unit	Value	Testing methods
Hardness:	Shore A	75 ± 5	DIN ISO 7619-1
	°IRHD, CM	75 ± 5	DIN ISO 48
Tensile strength:	MPa	> 12,5	DIN ISO 53504
Elongation:	%	> 300	DIN ISO 53504
Compression set: (24 h / 100 °C)	%	< 18	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.

Our clients define the aims of everything we do. New ideas and products are developed quickly and in a market- and goal-oriented manner.

The result is often a major market benefit to our clients. Please refer to www.cog.de or contact us directly for more information. Let's discuss your aims.



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

