AP 318



AP 318 – Approved for the food and pharmaceutical industries

Highly sensitive, therefore highly precise: One of the greatest challenges in the field of sealing technology is the use of seals in systems used in the food and pharmaceutical industries. The components involved are subject to strict regulations and must be certified as meeting all the relevant standards.

COG's high performance AP 318 EPDM compound has been developed to meet special demands and a wide range of challenges. The material has a hardness of 70 Shore A and has all important certifications: FDA 21. CFR 177.2600, Elastomer Guideline, USP Class VI up to +70 °C, Chapter 88, NSF/ANSI Standard 51 and 61 and 3-A Sanitary Standard 18-03, Class 2. Furthermore, this prime compound meets crucial drinking water standards, including DVGW W 534 and W270 plus approval by WRAS, ÖNORM and ACS. Thanks to its excellent resistance to hot water and vapor, the AP 318 is an absolute all-rounder. It is equally suitable for applications involving CIP and SIP processes (cleaning/sterilisation in place).









Properties of AP 318

- **O** EPDM terpolymer, peroxidically crosslinked
- O Hardness: 70 Shore A
- O Operating temperature range: from -35 °C to +140 °C
- O Compression set (22 h / 100 °C): 12 %
- O Excellent resistance to ageing and ozone
- **O** Very good resistance in the CIP/SIP processes
- Approvals/Certifications: FDA, Elastomer Guideline, USP Class VI up to +70 °C, 3-A Sanitary Standard 18-03, Class 2, DVGW W 534 and W 270, DIN EN 681-1, NSF/ANSI Standard 51 and 61, WRAS BS 6920, ÖNORM B 5014-1, ACS, AS/NZS 4020:2005



AP 318 – Approvals are standard for this high performance EPDM

AP 318 is the all-round compound that enjoys the most approvals for use in the food and pharmaceutical industries, and also in the drinking water section.

Conventional O-ring materials lack the legally required approval for use in applications in the food and pharmaceutical industries. These applications demand a material that is not only resistant to the various interactions between substances that are prevalent, but which also comes with the necessary approvals. Elastomer seals made from the AP 318 EPDM material have been awarded numerous certifications and approvals for use in these industries. The material's excellent properties mean that the seals can be used universally, including for applications involving CIP and SIP processes.





DATA SHEET

| COG-No.: | AP 318 | | |
|------------------------------------|---|--------------------|---------------------------|
| Basic elastomere: | Ethylene-propylene-diene rubber (EPDM) | | |
| Colour: | black | | |
| Temperature range: | from -35 °C to +140 °C | | |
| Certificates/approvals: | FDA 21. CFR 177.2600, Elastomer Guideline, DVGW W 534 and W 270, DIN EN 681-1, ACS, USP Class VI to +70 °C, Chapter 88, NSF/ANSI Standard 51 and 61, WRAS BS 6920, 3-A Sanitary Standard 18-03, Class 2, ÖNORM B 5014-1, AS/NZS 4020:2005 | | |
| Comment: | Peroxidically crosslinked | | |
| Rubber technology data | | | |
| Properties | Unit | Value | Testing methods |
| Hardness: | Shore A °IRHD, CM | 75 ± 5 72 +3/-8 | ASTM D 2240 DIN ISO 48 |
| Tear resistance: | MPa | > 16 | ASTM D 412 |
| Ultimate elongation: | % | > 160 | ASTM D 412 |
| Compression set (22 h / 200 °C) | % | < 12 | DIN ISO 815 |
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SIP = Sterilsation in place CIP = Cleaning in place

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.

