

Si 660, TR Si 670, TR VMQ

FDA 21. CFR 177.2600

3-A Sanitary
Standard 18-03

USP Class VI



C. OTTO GEHRCKENS
SEAL TECHNOLOGY



Si 660, TR / Si 670, TR – Hygiene and safety for foodstuffs and pharmaceuticals.

Specially developed for sensitive environments with strict hygiene and safety standards:

The two translucent compounds Si 660, TR and Si 670, TR are identical except for their hardness and meet the highest standards for the food and the pharmaceutical industry. In addition to their outstanding rubbery-elastic properties, they are highly resistant to weathering and ageing, making these silicone rubber O-rings suitable for numerous applications relevant to industry. The compounds have successfully passed the compliance test according to FDA 21 CFR 177.2600 and the cytotoxicity test (ISO 10993-5:2009).



Performance highlights

- Approvals: FDA, 3-A Sanitary Standard as well as USP Chapter 87 and Chapter 88 Class VI up to +121°C
- ISO 10993-5:2009 (cytotoxicity test)
- Outstanding operating temperature range from -50°C to +200°C
- For many different fields of application
- Durable in CIP and SIP processes

Doubly strong. Simply safe.

Platinum cross-linking of the silicone rubber is a crucial advantage of the two materials Si 660,TR and Si 670,TR. This method prevents the formation of unwanted by-products. With approvals according to 3-A Sanitary Standard 18-03, Class 1 as well as USP Chapter 87 and Chapter 88 Class VI up to +121 °C, the compounds Si 660,TR and Si 670,TR also meet the strictest requirements for safe and hygienic use in sensitive production processes.

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Material profile

COG material:	Si 660,TR and Si 670,TR
Basic elastomer:	Silicone rubber (VMQ)
Colour:	translucent
Temperature range (air):	from -50 °C to +200 °C
Approvals/Certifications:	FDA 21 CFR 177.2600, BfR-recommendation XV VO (EG) Nr. 1935/2004, VO (EG) Nr. 2023/2006 (GMP), 3A Sanitary Standard 18-03 Class 1, USP Chapter 87 and USP Chapter 88 Class VI to +121 °C, ISO 10993-5 (cytotoxicity test), ADI-free, good resistance in CIP/SIP processes



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

Rubber technology data				
Properties	Unit	Specimen		
		Si 660,TR	Si 670,TR	Testing methods
Hardness	Shore A	60±5	70±5	DIN ISO 48
Hardness	°IRHD, CM	60±5	72±5	DIN ISO 48
Tensile strength	MPa	> 8,5	> 8,5	DIN 53 504
Elongation	%	> 500	> 400	DIN 53 504
Compression set (24h/100 °C)	%	< 15	< 15	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.



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