

# 75 FKM 239961



FKM (fluoro rubber) is ideally suited for use in the entire process industry. In the food industry, for example, the material is predestined for applications with high temperatures or aggressive media, where other elastomers such as EPDM or HNBR reach their limits. It is also recommended in the beverage industry for contact with pure citrus juices, dairy products and aromatic oils.

As a peroxide cross-linked material, the newly developed 75 FKM 239961 from Freudenberg Sealing Technologies meets

the latest regulatory requirements for materials in the food industry with direct product contact. Its very high purity, media and temperature resistance enable its use in a wide range of applications as a static or dynamic seal. Due to its clean structure, the material meets all necessary long-term certifications such as EG (Reg.) 1935/2004, FDA § 177.2600, USP Chapter 87 (in vitro), 3-A® Sanitary Standards, USP Class VI Chapter 88 (currently in process), ADI free and BfR XXI (Kat. 4).

## MATERIAL PROPERTIES

MATERIAL	COLOR	CROSS-LINKING	TEMPERATURE RESISTANCE	PROPERTIES AND ADVANTAGES
75 FKM 239961	black	peroxide	-25 °C to +200 °C / -13 °F to +392 °F	<ul style="list-style-type: none"> <li>• Material with high purity standards that meets the latest requirements of the food and beverage industry</li> <li>• Very good media and temperature resistance</li> <li>• Industry-specific approvals (EG (Reg.) 1935/2004, FDA § 177.2600, USP Chapter 87 (in vitro), 3-A® Sanitary Standards, USP Class VI Chapter 88 (currently in process), ADI free and BfR XXI (Kat. 4))</li> </ul>

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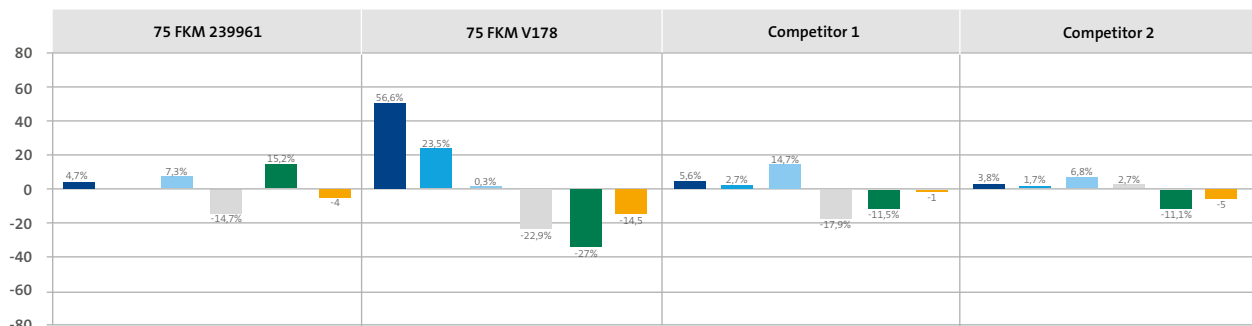


If you are interested, write your request to:  
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## BENCHMARK STUDY: CIP VALUES

Benchmark studies are a proven method to better understand the suitability of a material for application media. Freudenberg Sealing Technologies has carried out these for the material 75 FKM 239961 compared to competitor materials as well as to its own standard material 75 FKM V178 (see Fig. 1 and Fig. 2). Two different CIP media were used in high concentrations, representing a broad group of chemical properties. In the examples shown below, a basic CIP cleaner (5%) and an acidic CIP cleaner (2%) were

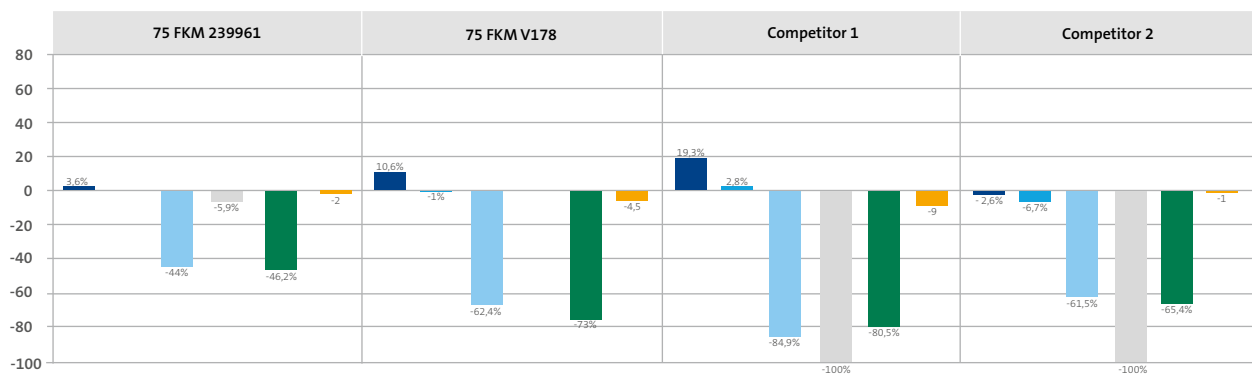
used representatively over a long period of 168 hours. The result: 75 FKM 239961 performed convincingly in both media compared to the standard material 75 FKM V178 and the competitors' materials. The combination of relevant conformities and high chemical resistance, even in long-term tests, make the material an ideal candidate for sealing demanding applications.



Change of:

Volume %   Mass %   Elongation at Break %   Modulus %   Tensile Strength %   Hardness

Fig. 1: Storage test in an acidic CIP cleaner (2%) at 80 °C / 176 °F after 168 h



Change of:

Volume %   Mass %   Elongation at Break %   Modulus %   Tensile Strength %   Hardness

Fig. 2: Storage test in a basic CIP cleaner (5%) at 80 °C / 176 °F after 168 h

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