

## Material test report FKM 90

Colour **Black** Temp. range static **-20°C / +230°C**  
(short time +240°C)

Property	Unit	Test method	Test parameter	Value
Hardness	Shore A	ASTM D 2240		90±5
Specific gravity	g/cm <sup>3</sup>	ASTM D 1817		1,85
Tensile strength	MPa	ASTM D 412		19,5
Ultimate elongation	%	ASTM D 412		110
Compression set	%	ASTM D 395 B/1	70h / 200°C	25
DSC glass transition	°C			-7
Low temp. resistance	°C	ASTM D 1329	TR10	-6,5

### Changes of properties after ageing

Medium	Test method	Time	Temperature	Hardness Points	Tensile strength	Ultimate elongation	Volume
		H	°C		%	%	%
Air	ASTM D 573	70	250	+2	-16	+15	
ASTM IRM 903	ASTM D 471	70	175	-1	-10	-10	+1,7
Methanol	ASTM D 471	70	23	-5,5			+7
Steam	ASTM D 471	168	150	-4,5			+5,6
Test fuel FAM B	ASTM D 471	168	23	-5			+6
Benzol (benzene)	ASTM D 471	70	40	-9			+12,5

peroxide cured  
oil/gas applications  
AED - Anti Explosive Decompression  
NORSOK M710 (AED) – 5.33 mm  
API6A (sour gas environment) – 10% H<sub>2</sub>S [FF/HH]  
Saudi Aramco 06-SAMSS-001 02.2017  
Saudi Aramco 06-SAMSS-001 03.2013

The above indicated data were determined to the best knowledge according to modern laboratory standards on standardised test specimen. If these data are compared with data which were determined on finished parts it may come to variations.