

Teflex-EPDM - Technical Data Sheet

1. Introduction

ERIKS Teflex O-Rings (EPDM) are composed of an EPDM elastomer encapsulated in seamless FEP or PFA-cover. The elastomer works as a rubbermaterial and helps the slow recovery of the FEP or PFA-cover. The chemical resistance of FEP and PFA is almost the same as PTFE. FEP and PFA comply with the FDA and USP class VI regulations for contact with food and pharmaceuticals.

2. Product Description

Chemical Composition	• FEP COVER: Copolymer of Hexa-Fluorpropylene and Polytetrafluorethylene (PTFE)
	• PFA COVER: Copolymer of Perfluoralkoxy and Polytetrafluorethylene (PTFE)
	• CORE: EPDM
Physical form	: O-Rings
Colour	: Cover: Translucent
Storage stability*	: 10 years

* : Following ISO 2230 conditions

3. Physical Properties

Test Method	Norm	Test Values
Specific Weight EPDM	ASTM D 1817	1,31
Hardness	ASTM D 2240	70° ± 5° Shore A
Tensile Strength at break	ASTM D 412	11,8 MPa
Elongation at break	ASTM D 412	418%
Compression Set, 22h/100°C	ASTM D 395 B	13,9%
FEP cover		
Tensile Strenght	ASTM D 2116	28 MPa
Fusion Point	ASTM D 3418	260°C
PFA cover		
Tensile Strength	ASTM D 2116	28 MPa
Fusion Point	ASTM D 3418	305°C

4. Temperature Resistance

- with FEP: -60° to +200°C
- with PFA: -60° to +260°C

5. Chemical Resistance

Concentrated acids	: very good
Acetone	: very good
Hydroxides	: very good
Benzol	: very good
Crude oil	: very good
Toluene	: very good
ASTM Fuel C	: very good
MEK	: very good
MTBE	: very good
Water	: very good
Steam	: very good

6. Advantages

- Excellent chemical resistance, comparable with that of PTFE
- Low compression set of EPDM core

7. Other Information

- Other colours available on demand
- FEP in conformity with Foods and Drugs Administration (21 CFR 177.1550; 21 CFR 177.2600; 21 CFR 175.105, 21 CFR 176.180; 21 CFR 177.1520; 21 CFR 175.300; 21 CFR 176.170)
- PFA in conformity with Foods and Drugs Administration (21 CFR 177.1550; 21 CFR 175.105, 21 CFR 176.180; 21 CFR 175.300; 21 CFR 176.170)
- EPDM inside optional compliant with FDA 21 CFR 177.2600
- FEP and PFA in conformity with U.S. Pharmacopeia (USP) class VI
- This compound is ADI (Animal Derived Ingredient Free).

