

TYPE EXAMINATION CERTIFICATE

This is to certify:**That the Gaskets and Sealings**with type designation(s)
SF4300

Issued to

Flexitallic Limited
Cleckheaton, United Kingdomis found to comply with
ASTM F152
ASTM F36

Application :**Temperature range:** see manufacturer's instructions**Max. working press.:** see manufacturer's instructions**Design:****Sizes:**Issued at **Hamburg** on **2017-08-08**This Certificate is valid until **2022-08-07**.DNV GL local station: **Newcastle-upon-Tyne**for **DNV GL**Approval Engineer: **Guido Friederich**

Olaf Drews
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Examination Certificate and not to the approval of equipment/systems installed.



Product description

SF4300 gasket material is suitable for sealing in large range of technical process applications comprising water, oils, fuels, refrigerants, mild acids and alkalis.

SF4300

Technical data		Unit
Thickness range	0,75 to 6,0	mm
Colour	Green/white	
Compression (ASTM F 36)	9	(%)
Recovery (ASTM F36)	52	(%)
Stress Relaxation DIN 52913, 50MPa, 16h / +175°C	36	MPa
50MPa, 16h / +300°C	31	MPa
Density:	1,86	g/cm ³
Residual stress at +300°C (BS 7531)	25	MPa
Gas leakage (DIN 3535/6)	<0,1	ml/min
Thickness increase (ASTM Oil 3)	1,7	%
Thickness increase (ASTM Fuel B)	5	%

Application/Limitation

The above listed compressed gasket material sheet type with a blend of organic and glass fibres bound and rubber binder may be used under consideration of the mechanical and technical characteristics as well as physical and chemical properties for the following applications:

- Ship's piping systems, pressurized items and machinery containing e.g. the following fluids: non flammable gases, oil, fuel oil, water.
- Maximum allowable working pressure and temperature according to the specification of the manufacturer.
- The selection of the gaskets for the corresponding application and appropriate installation has to be in accordance with the instructions of the manufacturer.

Limitations and exclusions:

- Pipe lines for LNG and flammable gas systems, cryogenic fluids, cargo lines on chemical and gas tankers carrying flammable and/or noxious media, propylene oxide and mixtures of ethylene and propylene oxide.
- Steam lines

Type Examination documentation

- Test Report BAM, Reference Number 16025179 E, dated 2016-05-24

Tests carried out

- Gas leakage (DIN 3535/6) / (BS 7531)
- Tensile test (ASTM F152)
- Compressibility + Recovery (ASTM F36)
- Residual stress (BS7531)
- Test for use of the gasket material SF4300 in flange connections for gaseous oxygen service at temperatures up to 60°C and 100 bar.

Marking of product

Job Id: **262.1-022183-1**
Certificate No: **TAP000010D**

The flat gasket material SF4300 shall be clearly marked with the following minimum signs:

- Manufacturer's name / label
- Gasket sheet material non asbestos
- Product number

Certificate Retention Survey

A condition for retention of the Type Approval Certificate in its validity period is that periodical assessments are successfully carried out.

The objective of the periodical assessment is to verify that the conditions for the type approval have not been altered.

The main scope of the periodical assessment will normally include:

- Verification of the TA applicant's production and quality system w.r.t ensuring continued consistent production of the type approved products at the TA applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the TA documentation and that this is still used as a basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking

END OF CERTIFICATE