

# Approval Certificate



This is to certify, that the undernoted products have been approved in accordance with the relevant requirements of the GL Approval System.

Certificate No. 98 951 - 97 HH

Company Rich. Klinger Dichtungstechnik GmbH & Co. KG

Am Kanal 8-10  
2352 Gumpoldskirchen, AUSTRIA

Product FLAT GASKETS - ASBESTOS FREE

Type KLINGERSIL C-4300 / 4243 / 4324 / 4400

Technical Data /  
Application

#### TECHNICAL DATA (continued)

Type	KLINGERSIL C-4300
Density	1.6 [g/cm <sup>3</sup> ]
Compressibility	14% { ASTM F 36 J }
Recovery	=/> 50% { ASTM F 36 J }
Tightness	0.2 [ml/min] { DIN 3535-6 }
Soluble chloride content	150 [ppm]
Klinger cold / hot compression, 50 MPa	thickness decrease at 23 [°C]: 10% thickness decrease at 300 [°C]: 25%

#### RANGE OF APPLICATION

The gaskets may be used under consideration of the mechanical and physical properties as well as the chemical resistance as follows:

- Ship's piping systems excluding cargo lines on Chemical and Gas Tankers carrying propylene oxide and mixtures of ethylene / propylene oxide.
- Maximum allowable working pressure and temperature according to the specification of the manufacturer.

Approval Standard • ASTM and DIN

Documents • Test Reports  
• Technical Data  
• Audit Report

Remarks • TECHNICAL DATA, PRODUCTION PLACES and REMARKS / LIMITATIONS  
see page 2.

Valid until 2018-11-20

File No. XI.B.03

**Germanischer Lloyd**

Hamburg, 2014-01-08

  
Olaf Drews

  
Peter Gierhan

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## TECHNICAL DATA

Type KLINGERSIL C-4243  
Density 1.75 [g/cm<sup>3</sup>]  
Compressibility 8% { ASTM F 36 A }  
Recovery => 55% { ASTM F 36 A }  
Tightness 0.4 [ml/min] { DIN 3535-6 }  
Klinger cold / hot compression, 50 MPa thickness decrease at 23 [°C]: 10%  
thickness decrease at 200 [°C]: 25%

Type KLINGERSIL C-4324  
Density 1.85 [g/cm<sup>3</sup>]  
Compressibility 10% { ASTM F 36 J }  
Recovery => 55% { ASTM F 36 J }  
Tightness 0.4 [ml/min] { DIN 3535-6 }  
Klinger cold / hot compression, 50 MPa thickness decrease at 23 [°C]: 10%  
thickness decrease at 300 [°C]: 25%

Type KLINGERSIL C-4400  
Density 1.6 [g/cm<sup>3</sup>]  
Compressibility 11% { ASTM F 36 J }  
Recovery => 55% { ASTM F 36 J }  
Tightness 0.2 [ml/min] { DIN 3535-6 }  
Soluble chloride content 150 [ppm]  
Klinger cold / hot compression, 50 MPa thickness decrease at 23 [°C]: 10%  
thickness decrease at 300 [°C]: 22%

## PRODUCTION PLACES

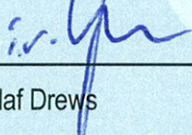
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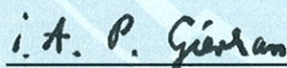
## REMARKS / LIMITATIONS

The selection of the gaskets for the corresponding application and the appropriate installation is to be in acc. with the instructions of the manufacturer.

**Germanischer Lloyd**

Hamburg, 2014-01-08

  
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