

## Certificate



FH Münster

Center of Sealing Technologies

Bürgerkamp 3 D-48565 Steinfurt

## Z13071701-3

The flat gasket type
TEDIFLON – SUPRA – HP-R
of the manufacturer

Tedima GmbH Carl-Sonnenschein Str. 70 47809 Krefeld Germany

has been tested in compliance with TA Luft in accordance with the VDI-guideline 2200 (2007-06) by the Department of Gasketing Research of the University of Applied Sciences Münster. The test was verified in a first time test with following test conditions:

Initial gasket thickness:

2 mm

Test flange:

DN40/PN40, EN1092-1, type B, welding-neck, 1.4571

Initial gasket stress:

30 MPa

Thermal storage temperature:

200 °C

Thermal storage duration:

48 h

Test conditions:

20 °C

The leak rate, measured at 20 °C, with a helium mass spectrometer and a differential pressure of 1 bar resulted in a leak rate of:

$$1.5 \cdot 10^{-6} \frac{mbar \cdot l}{s \cdot m}$$

Residual gasket stress (QR):

8.7 MPa

The maximum acceptable leak rate of  $1\cdot 10^{-4}~\frac{mbar\cdot l}{s\cdot m}$  according to VDI-guideline 2440 (2000-11) has not been exceeded. The above mentioned gasket is in accordance with TA Luft.

The blowout safety test in accordance to VDI-guideline 2200 resulted for

Test step 1 at QR:

60 bar, no blowout

Test step 2 at 5 MPa (Q<sub>Smin</sub>):

60 bar, no blowout

This test certificate is only valid in combination with the test report 13071701.

Prof. Dr. A. Riedl

Steinfurt, 2014-03-18