

**BAM****Bundesanstalt für
Materialforschung
und -prüfung**

Unter den Eichen 87
12205 Berlin
Telefon: (0 30) 81 04-0
E-Mail: info@bam.de
Internet: www.bam.de

Report

on the Evaluation of a Flange Gasket for Oxygen Service

Reference Number II-2629/2004 V E

Copy 1. Copy of 2 Copies

1 Application

Customer Rich. Klinger
Dichtungstechnik GmbH & Co KG
Am Kanal 8 – 10
2352 GUMPOLDSKIRCHEN
AUSTRIA

Order Date July 15, 2004

Reference -

Receipt of Order July 16, 2004

Test Samples Gasket KLINGERtop-graph-2000 for use in flanged connections in piping for oxygen has already been tested and evaluated in 2002. A sample was not required for this evaluation.

Basis of Evaluation Regulation BGV B 7 „Oxygen“ of the „Berufsgenossenschaft der chemischen Industrie“ and results of test methods according to the annex of the pamphlet „Liste der nichtmetallischen Materialien die von der Bundes-anstalt für Materialforschung und -prüfung (BAM) zum Einsatz in Anlageteilen für Sauerstoff als geeignet befunden worden sind.“ (Edition: 31. August 2003) of BGV B 7.

2 Documents

The following documents were submitted to BAM:

- 1 application
- 1 e-mail of June 16, 2004

This test report consists of page 1 to 2.

This test report may only be published in full and without any additions. A revocable permission in writing has to be obtained from BAM for any amended reproduction of this certificate or the publication of any excerpts. The test results refer exclusively to the tested materials.

In case a German version of the test report is available, exclusively the German version is binding.

TESTREPORT



3 Evaluation

The gasket KLINGERtop-graph-2000 has already been tested and evaluated under the reference number II-3797/2002-I in 2002. According to the letter of July 15, 2004 the gasket has not been modified in its composition and manufacturing since that time.

There are no objections with regard to technical safety to use the gasket KLINGERtop-graph-2000 in flange connections made of copper, copper alloys or steel at oxygen pressures up to 130 bar and at temperatures up to 95 °C. This applies to flat faced flanges, male/female flanges, and flanges with tongue and groove.

Because of test results, the gasket KLINGERtop-graph-2000 is not suitable for use in plants or components for liquid oxygen.

4 Comments


This report expires at once, if the composition of the tested material is changed. This report expires on September 30, 2014, at the latest. A prolongation beyond this date is possible, if the manufacturer confirms in writing that the material has not changed since this evaluation.

Products that have been tested by us, and which are on the market, shall be marked according to our evaluation in the BAM test report. A label on a product saying that a BAM test has been performed and (or) citing our reference number, only, is not tolerable. The use of the product and its safe operating conditions must also be given.


It shall be clear that the product may be used only for gaseous oxygen service. The maximum safe oxygen pressure of the product and its maximum use temperature as well as other restrictions in use shall be given.

**Federal Institute for Materials Research and Testing (BAM)
12200 Berlin, September 10, 2004**

**Division II.1
"Gases, Gas Plants"**


Dr. Chr. Binder
Head of Laboratory

**Laboratory II.13
"Equipment for Gases, Oxygen"**


Dipl.-Ing. K. Arlt
Engineer in Charge

Copies:

1. Copy: Rich. Klinger Dichtungstechnik GmbH & Co KG
2. Copy: BAM – Laboratory II.13, Dr. Binder