

**BAM****Bundesanstalt für  
Materialforschung  
und -prüfung**Unter den Eichen 87  
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## Report

on the Evaluation of a Flange Gasket for Oxygen Service

**Reference Number** II-2629/2004 VI 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-chem-2000 for use in flanged connections in piping for oxygen has already been tested and evaluated in 1995. A sample was not required.**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 Bundesanstalt 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.

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

**TESTREPORT**

### **3 Evaluation**

The gasket KLINGERtop-chem-2000 has already been tested and evaluated under the reference number 5395/95, II-2710 in 1995. 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-chem-2000 in flange connections made of copper, copper alloys or steel at oxygen pressures up to 100 bar and at temperatures up to 200 °C. This applies to flat faced flanges, male/female flanges, and flanges with tongue and groove.

There are also no objections to use the flat gasket material KLINGERtop-chem-2000 in plants or components for liquid oxygen. In this case, a limitation to a particular pressure range is not necessary as compression of liquid oxygen causes no significant changes in concentration and therefore has no considerable influence on the reactivity of the material.

### **4 Comments**

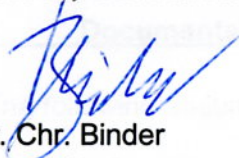
This report expires at once, if the composition of the tested material is changed. This report expires on September 30, 2014, at the latest. A prolongation beyond this date is possible, if the manufacturer confirms in writing that the material has not changed since this evaluation.

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 for gaseous and/or liquid 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**

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

  
Dr. Chr. Binder  
Head of Laboratory

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

  
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