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Report
on the Evaluation of a Flange Gasket for Oxygen Service

Reference Number II-2291/2004 I E

Copy 1. Copy of 2 Copies

1 Application

Customer KLINGER AG Egliswil
Seonerstraße 287
Industrie Nord
5704 EGLISWIL
SWITZERLAND

Order Date June 21, 2004

Reference Dr. Urs Wegmann

Receipt of Order June 23, 2004

Test Samples The gasket KLINGERgraphitlaminat SLS 150 for use in flanged connections in piping for gaseous oxygen at temperatures greater than 60 °C and for liquid oxygen was already tested and evaluated in 1995. A sample was not required for this evaluation.
BAM-Order No. II.1/47 503

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 befun-den worden sind."
(Edition: 31. August 2003) of BGV B 7.

TESTREPORT

This test report consists of page 1 to 2.

2 Documents

The following documents were submitted to BAM:

1 application
1 letter of June 9, 2004
1 Certificate of Approval

3 Evaluation

The gasket KLINGERgraphitlaminat SLS 150 was already tested in 1995 and has been evaluated under the reference number 8429/95; II-4133 I. According to the letter of June 21, 2004 the gasket has been not modified in its composition and manufacturing since the time of the tests.

There are no objections with regard to technical safety to use the gasket KLINGERgraphitlaminat SLS 150 in flange connections made of copper, copper alloys or steel at oxygen pressures up to 130 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 KLINGERgraphitlaminat SLS 150 in plants or installations 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 August 31, 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, August 11, 2004

Subdivision II.1
"Gases, Gas Plants"

Dr. Chr. Binder
Head of Laboratory

Laboratory II.13
"Equipment for Gases, Oxygen"

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