



FLEXITALLIC LIMITED

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**PRODUCT
REFERENCE:**

ENVIROFLEX 500

DESCRIPTION:

Enviroflex 500 is a low emission valve stem sealing system designed for high temperature applications.

Enviroflex 500 is supplied as a five ring set, consisting of three moulded graphite rings and two braided anti-extrusion rings. The moulded components are manufactured from high purity (99.9% wt) exfoliated graphite foil. The anti-extrusion rings are manufactured from a low sulphur graphite foil containing corrosion inhibitors and reinforced with Inconel wire. Enviroflex 500 is totally free of PTFE and is therefore suitable for use at high temperatures where there may be corrosion concerns following the thermal decomposition of PTFE.

Enviroflex 500 is also suitable for low temperature applications including cryogenic service down to -196°C.

*Leachable halides (chlorides & fluorides); < 10 ppm
Sulphur content (total); <500 ppm*

This product does not contain any PTFE.

SERVICE:

Enviroflex 500 has been developed for use in Linear and Rotary valves, both control and hand operated.

*pH Range: 0 - 14**

Maximum recommended service temperature: 550 °C (1020°F)

*Maximum recommended service pressure: 860 bar
(12470 psi, 86 MPa)*

** Not recommended for use with strong oxidising agents.*

Please note that statements of operating limits are not an indication that these values can be used simultaneously or that they apply in all chemical media.

AVAILABILITY:

Enviroflex 500 can be manufactured in sizes to fit stuffing boxes of most valves. Please contact our sales offices for further details.

INSTALLATION:

Please refer to Flexitallic document 'Enviroflex Installation Guidelines'. Product data sheet (PDS) number 334.

PDS 794 05/12

This Data Sheet refers to the material as supplied. The information contained herein is given in good faith, but no liability will be accepted by the Company in relation to same. We reserve the right to change the details given on this Data Sheet as additional information is acquired. Customers requiring the latest version of this Data Sheet should contact our Applications Engineering Department. The information given and, in particular, any parameters, should be used for guidance purposes only. The Company does not give any warranty that the product will be suitable for the use intended by the customer.

HEALTH AND SAFETY

Because of the processes which take place during manufacture, the product is believed to present no health and safety hazard and, under normal handling and use it is unlikely that the product will give rise to significant levels of exposure to constituent materials.

The braided header rings of ENVIROFLEX™ 500 contain high purity, low sulphur graphite, corrosion inhibitors and inconel wire. The three moulded rings contain graphite.

Under harsh mechanical treatment (e.g. abrasion) the constituents may give rise to irritant dust which, in extreme cases of exposure, could lead to more serious respiratory problems. Occupational exposure to such dusts should therefore be minimised and kept below relevant national exposure limits. Good standards of hygiene should be applied during cutting, installation and removal and packing residues should be disposed of by transfer to a site appropriately licensed to accept industrial materials of this nature.

Although the constituents are non-flammable, at elevated temperatures or in a sustained fire, decomposition will occur and give rise to irritant, and in some instances harmful or toxic fumes.

For more detailed information, reference must be made to our Health and Safety Bulletin, Sections 1, 2, 2.11, 2.15, 3 and 3.2. This will enable you to carry out any necessary assessment of risk which may be required under national or local legislation.