



## Application Recommendations for Wetted Internal Valve Seals Used in H<sub>2</sub>S and Related Services

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Products Affected: All product lines with elastomeric seals

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The following summarizes Norriseal application recommendations for wetted internal valve seals for use in H<sub>2</sub>S and related services. It is assumed that all applications are "wet" gases.

### Material Selection for H<sub>2</sub>S

- (1) For temperatures above 250°F, review the actual application parameters.
- (2) For H<sub>2</sub>S in concentrations of 20,000 ppm (2%) and less: use Viton® material.
- (3) For H<sub>2</sub>S concentrations greater than 20,000 ppm (2%): use Aflas® material.
- (4) H<sub>2</sub>S in any concentration combined with CO<sub>2</sub>: use Aflas material (an alternate choice is HSN)

### Material Selection for EDR

There are three Explosive Decompression Resistant (EDR) options in the Norriseal system:

- (1) Peroxide cured Buna EDR
- (2) Viton EDR
- (3) Although not currently in our parts system, an EDR rated Aflas is available (A brochure on this material is available)

### Cost

The standard NACE adder can be used for either Viton or Aflas.

### Notes

- Norriseal can offer a modification to the diaphragm actuator to supply resistant seals when there is H<sub>2</sub>S in the supply gas.
- TECHNICAL BULLETINS DO NOT ENHANCE OR EXTEND AN EXISTING WARRANTY, AND DO NOT INCLUDE OR CREATE ANY WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Preventive service repairs will generally not be performed under warranty during the normal warranty period if a product is not exhibiting the particular symptom or problem or if the problem would not otherwise be covered by a warranty. Technical Bulletins are not recalls.

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- As we continue to receive questions and comments, this bulletin will be updated as necessary.
- Prior to any H<sub>2</sub>S application, a complete evaluation of the products, applications and systems should be completed to confirm the design meets any and all applicable health and safety requirements. Norriseal assumes no liability for the application and system performance of any design.
- Due to the continuous improvement at Norriseal, specifications and/or prices are subject to change without notice or obligation.

### Engineered Performance

Norriseal is an ISO 9001-certified manufacturer of level and pressure control products, level gauges, control valves, butterfly valves, check valves and regulators. For more than five decades, Norriseal products have set performance standards in oil and gas production, gas transmission, refining, chemical processing, marine, power generation and other industrial applications.



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