

# OIL & GAS

World leaders in valve integrity

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## TECHNICAL DATA SHEET

Quality Standards:  
ISO 9001:2008  
ISO 14001: 2004

Issue Date: February 2017

## VALVE SEALANT 701-L

Heavy duty gate valve sealant—for valves with buried check-valve injection fitting.

### Introduction

API 6A gate valves are designed to achieve a metal to metal seal between the gate and seat. In some cases the seal surfaces can be damaged, either because of insufficient preventative maintenance. Poor choice of service lubricant, arduous, operating conditions or a combination of all.

In such cases Valve Sealant 701-L may be injected into the valve cavity, to assist in achieving a seal across the gate or seat surfaces. The ability of any sealant to provide a seal which will sustain full wellhead pressure, depends upon its performance and the specific condition of the valve components. Valve Sealant 701-L is field proven as highly effective.

It is important to note that the injection of a sealant is a temporary measure. The valve is leaking due to physical damage to the sealing surfaces, the valve or its components should be changed out at the earliest opportunity. The sealant may be employed to assist in regaining integrity so well intervention operations can be carried out in a cost-effective manner.

### Description

Valve Sealant 701-L is a specially formulated heavy duty valve sealant. In full scale testing it has been proven to seal a severely passing gate valve. Valve Sealant 701-L is fully resistant to all types of produced hydrocarbons and also to high levels of H<sub>2</sub>S and CO<sub>2</sub>.

Valve Sealant 701-L's physical texture and high metal adhesion promotes extended cavity retention. It also has enhanced lubricating properties to protect the sealing surfaces during further functioning of the valve under high differential pressure.

### Testing

Valve Sealant 701-L has been tested on an API 6A gate valve with a severely damaged seat component, cut to a depth of 0.75mm. Valve Sealant 701-L WG was deliberately able to hold 5,000 psi which is the pressure limit of a valve. A test report is available on request.

### Application

Valve Sealant 701-L should be used in gate valves with moderate to severe leaks, where the use of Valve Sealant 701 is not possible because the specific model of gate valve has a secondary, "buried" check valve injection fitting (refer to following page) Valve Sealant is fully compatible with Valve Sealant 701 and Valve Lubricant 601.

Valve Sealant 701-L may be injected into plug and ball valves in an attempt to assist with sealing however elastomer seal compatibility must be checked prior.

Valve Sealant 701-L can be pumped by high pressure pumps—please contact RS Clare for pump specification advice.

### Typical Characteristics

|                         |                  |
|-------------------------|------------------|
| Thickener               | Non-soap         |
| Base Fluid Type         | Synthetic        |
| Texture                 | Adhesive         |
| NLGI Grade              | No. 2            |
| Drop Point              | Non-melting      |
| Temperature Range       | 0°F to 350°F     |
| 4-Ball EP Test (IP 239) | Weld load >620kg |

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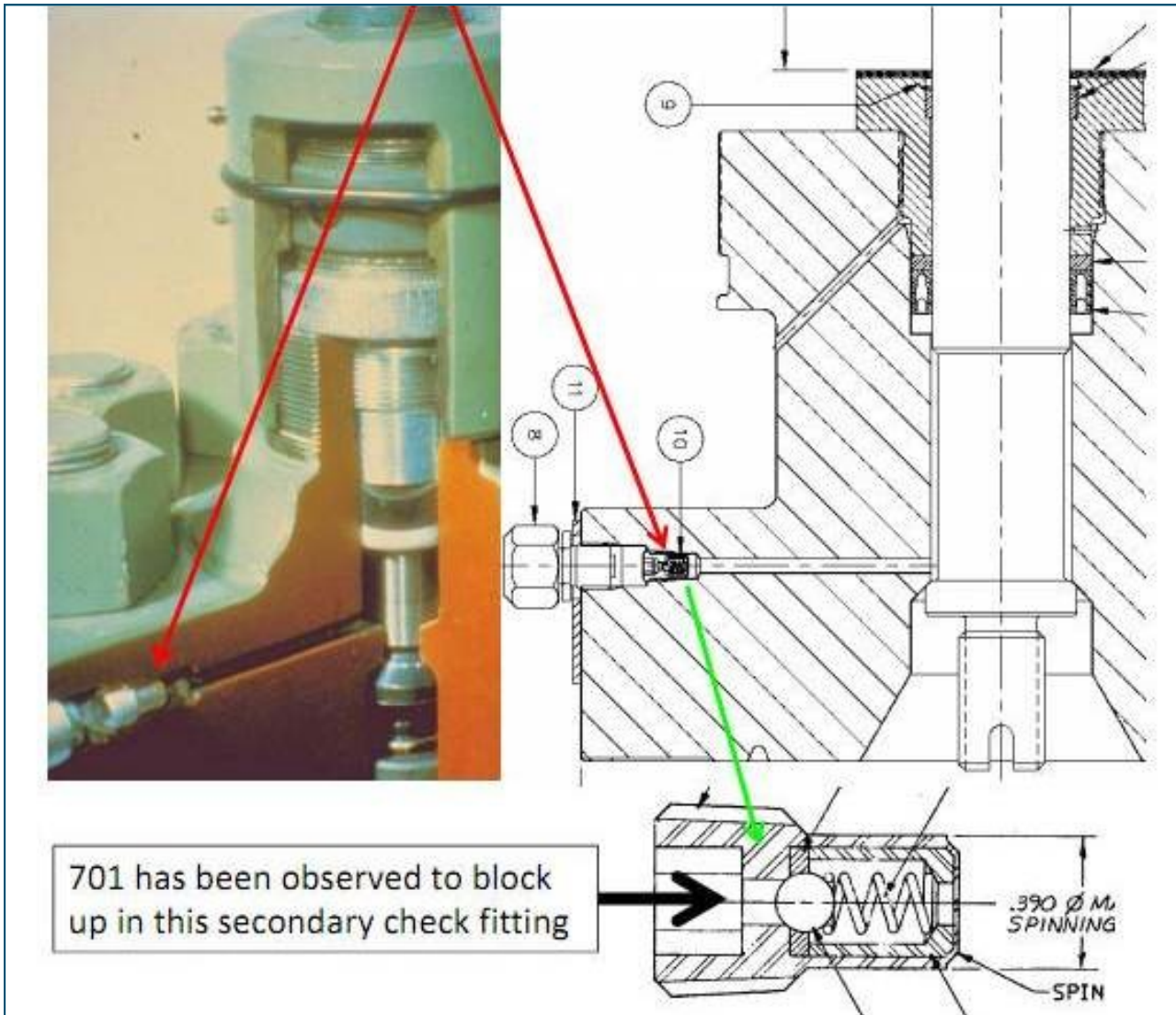


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## SECONDARY, "BURIED" INJECTION CHECK VALVE FITTING



Prior to injecting 701, the operator should identify the exact make, model and pressure rating of the gate valve, and confirm the arrangement of the sealant injection fitting (s) in the valves bonnet. If there is any doubt, it is recommended that test pumping 701 through a spare fitting, attached to the pump delivery hose end should be conducted before injection into the valve.