

# **ALCHEMY DYNACEAL®**

#### **PRODUCT** DESCRIPTION

**DynaCeal**<sup>®</sup> is a dynamic sealing system utilizing a two part liquid (Base and Link) which sets in a time and temperature dependant manner to form a solid polymeric material. The setting time of the DynaCeal<sup>®</sup> can be adjusted by the relative proportions of Base and Link mixed together, allowing enough time for the product to reach the application site, especially where the leak paths are difficult to reach.

### **APPLICATIONS**

DynaCeal<sup>®</sup> is extremely effective in providing a temporary seal to isolate pipelines and valves where leaks are present while repairs are carried out, or to facilitate installation of mechanical isolation tools. It resists differential pressure if supported and is designed to pack off against a void, or valve providing a barrier.

### EASY TO USE & DEPLOY

DynaCeal<sup>®</sup> is supplied in kit form containing Base and Link that are premeasured to meet the client application requirements. The kit components are mixed together at the work site before being injected into the area where sealing is required. Once applied, the sealant sets in 24-48 hours.

On completion of repairs, the DynaCeal<sup>®</sup> can be easily extruded, mechanically removed or chemically broken down in-situ with our **DynaBreak** product to allow the system to quickly return to normal operating conditions.

#### **ADDITIONAL** FEATURES

Alchemy can formulate DynaCeal<sup>®</sup> with varying densities to allow placement of the material in the correct area, relative to the production fluids or sea water, for maximum sealing efficiency. The viscosity of the product can also be modified dependent on access requirements or the size of the leak path.





### TYPICAL PROPERTIES

	Alchemy DynaCeal®
Viscosity of mixed product	Approx. 900cPs @ 18°C
Density	0.98 - 1.2 @ 20°C
Pot Life at Ambient Temp	ca. 2 - 6 hours
Set Time at Ambient Temp	24 - 48 hours
Storage Temperature	Below 30°C

## INNOVATIVE CHEMISTRY

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### **CASE** HISTORIES

• A NRV in a North Sea pipeline was leaking. Downstream of this valve a further piece of equipment had to be repaired. This repair could not be carried out without integrity at the NRV. The NRV was at the bottom of a vertical section of line which was filled with sea water with no direct access possible, the nearest application point being above the valve position. A high-density DynaCeal<sup>®</sup> was applied to the vertical pipeline above the NRV and allowed to fall down into the NRV to attain a seal. Once DynaCeal<sup>®</sup> set in the correct position, the system was tested before depressurisation. The DynaCeal<sup>®</sup> held pressure of up to 150 Bar, allowing for all repairs to be carried out safely and securely.

• DynaCeal<sup>®</sup> was used to seal a pipeline within the structure of a North Sea platform leg where a leak had occurred. The DynaCeal<sup>®</sup> was utilised in conjunction with Brinker Platelets to allow a Tecnowrap to be placed over the leaking area and allow production operations to resume.

• DynaCeal<sup>®</sup> has also been used to seal leak paths at wellheads for various North Sea Operators where a loss of integrity has been found and an isolation has to be made, and is routinely carried on the vessel during workover campaigns as a standby temporary barrier should an additional isolation be required.

### ABOUT US

Alchemy was founded in 2005 to provide Gels and Sealing materials to the energy industry. Our main product lines consist of Aqueous Gels, Gel Pigs, Glycol based Gels and Pigs and our range of sealant products.

We provide unique solutions to our Clients problems including consultancy and bespoke chemicals, usually on a tight time scale and delivery schedule.

We operate from our purpose build facility on the

# CONTACT US

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outskirts of Inverurie in the UK, ideally placed to service on and off-shore markets both in the North Sea and world wide.

Alchemy is ISO registered, and all products we supply for use in the North Sea associated with drilling and production are environmentally friendly and are registered with CEFAS.

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