

## Assist™ HC

### Enhanced Lubricious Coating

The heat-cured **Assist™ Enhanced Lubricious Coating** combines highly lubricious components with non-thrombogenic components to provide a **cost-effective solution** to surface modification.

### The Clinical Problem

The insertion and removal of medical devices such as catheters can be severely restricted by frictional forces that occur at the device-body interface. Such friction can increase the risk of inflammation, tissue damage and discomfort for the patient, all of which can prolong procedure times. In addition, the undesirable deposition of proteins and other blood components may occur on the device, owing to the poor haemocompatibility of the materials employed. This can lead, in some cases, to a greater risk of thrombus formation.

BioInteractions are dedicated to offering solutions that reduce such problems through application of their Enhanced Lubricious Coating, **Assist™ HC**.

### Development of Assist™ HC

**Assist™ HC** has been specifically developed to provide a stable, heat-cured coating, which can be applied simply to both the **internal and external surfaces** of a device. The coating provides exceptional lubricity when hydrated, thereby minimising the chance of tissue damage and patient discomfort.

**Assist™ HC** also provides the added benefit of non-thrombogenic properties that **reduce protein binding and platelet deposition** and subsequently minimises the chance of blood clot formation.

### The Coating Process

Our expertise in polymer synthesis, coupled with many years experience developing biocompatible coatings for the worldwide medical device industry, means we are strategically placed to offer a robust, reliable and cost-effective coating process.

Our heat-cured system can be applied successfully to a range of different substrates, geometries and lengths and the entire coating process can be **completed within 1 hour**. Typically, a 1-step dip-coating protocol is employed, which lends itself particularly well to a batch process.

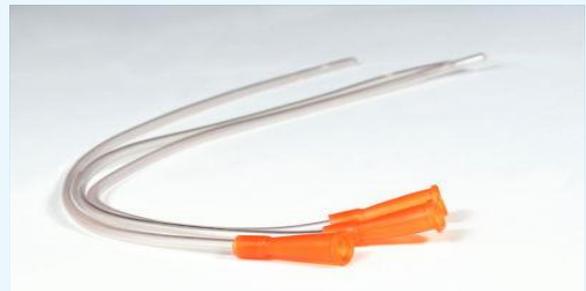


*Latex Foley coated with Assist™ HC, which has been dyed using Ponceau S (red colouration) to determine coating homogeneity*

The **Assist™ HC** coating technology has demonstrated enhanced lubricity and stability on materials such as:

- Poly(urethane)
- Poly(olefin)
- Poly(vinyl chloride)
- Latex
- Poly(styrene)
- Poly(carbonate)
- Pebax
- Nylon
- Silicone
- Poly(ester)

*Also applicable to many other substrates*



### Applications

The enhanced properties of **Assist™ HC** mean it is particularly well suited to a wide range of medical applications, including tissue contacting devices, such as intermittent and rectal catheters, as well as blood contacting devices, such as PTA catheters.

#### Clinical Applications for Assist™ HC include:

- Foley catheters
- Dilators
- Endotracheal tubes
- Feeding tubes
- PICC lines
- IOL inserters
- Rectal catheters
- Pacemaker leads
- Intermittent catheters
- Balloon catheters

### Collaboration

BioInteractions is committed to the advancement of healthcare through the development of innovative technologies and welcomes interest in the **Assist™ HC Coating** for application to both existing and new technologies that require the next generation of lubricious coatings.

#### BioInteractions Ltd.

Science and Technology Centre  
Earley Gate, Whiteknights Road  
Reading, Berkshire, RG6 6BZ  
United Kingdom

T +44 (0)118 935 7000  
F +44 (0)118 935 7917  
E [general@biointeractions.com](mailto:general@biointeractions.com)

[www.biointeractions.com](http://www.biointeractions.com)



FS531243

MD613895

