

HydroMed™

Slick, Sleek and Sheer – Permanently lubricious coatings exhibiting superior hydrophilic and adhesive characteristics.

Description

HydroMed D is a series of ether-based hydrophilic urethanes with excellent adhesive and cohesive properties while exhibiting tailored water absorption levels depending upon end product targets.

This material does not require UV curing and as such, provides a superior alternative to UV curable materials for devices which require inner lumen or complicated form coatings.

These materials were designed for use as coatings for a wide array of devices including catheters, guidewires, sutures, introducers, rods, and valves.

The HydroMed series can also be coated onto devices to reduce the absorption of white cells and proteins, thereby aiding in the analysis of blood and DNA.

HydroMed is processed by traditional solvent coating methods. The polymer granules can be dissolved in varying concentrations using most organic and inorganic solvent packages.



HYDROMED IN GRANULE FORM

The ASB Advantage

AdvanSource Biomaterials synthesizes and manufactures medical grade materials offering the ability to tailor physical and mechanical characteristics to support and enhance your end product design.

These mechanical characteristics, critical to the design and development of medical devices, can incorporate a wide range of physical and chemical properties while maintaining core characteristics such as biodegradability and biocompatibility. Specialized formulations, such as the addition of radiopaque or colorant agents and antimicrobial properties (where applicable) can be added to the polymer such to provide a homogeneous material and limit secondary processing steps.

In addition, radiopaque agents may also be incorporated into the formula to provide additional product enhancements and may contain up to 40%, by weight, of a radiopaque agent thus allowing varied-scale visibility options.

With an expanding range of secondary operations including custom solution development and prototype coating services, ASB's expert team of chemists, scientists, engineers and industry professionals assist in every stage of our customers' projects, from concept initiation through full-scale manufacture

An ASB product

EUROPEAN COUNCIL
DECISION - 1999/534/EC -
COMPLIANT

EXCELLENT LUBRICITY

PRODUCT SPECIFIC
ABSORPTION AND
EXPANSION RANGES

LOW HEAT-CURABLE

BIODURABLE

HIGH SLIP

HEIGHTENED ELONGATION

STRONG ADHESION
PROPERTIES

MULTIPLE PRE-MIXED
SOLUTIONS AVAILABLE

BIOCOMPATIBLE

AdvanSource
biomaterials

Creating Technology. Enabling Success.

HydroMed D Series*

PHYSICAL PROPERTIES

TYPICAL PROPERTIES

HM D Series*	D1	D2	D3	D4	D6	D640	D7	HydroSlip C
% Linear Expansion	45	25	40	50	60	100	10	180
% Water Content	70	55	60	50	80	90	30	95

TOLERANCE RANGES FOR HYDROMED D SERIES*

% Linear Expansion can range from +/- 10 to +/- 25 depending upon product selected*

% Water Content can range from +/- 2 to +/- 25 depending upon product selected*

* Data provided herein is meant to show a general range for the HydroMed product lines; these properties can be tailored to meet specific values based on customer requirements.

Processing Information

HydroMed solutions can be dip coated or spray coated. In the former, it is recommended to submerge into the solution for 3 to 20 seconds. The solvent will evaporate under normal, non-humid room temperatures within 3 to 30 minutes, depending upon concentration, solvent used and coating thickness.

Alternatively, the component can be oven heated up to 80°C for 2 to 15 minutes, depending on coating thickness, solvent choice and material substrate to expedite removal of the solvent.

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HydroMed Coatings

ASB provides each of the HydroMed grades in solution form. Based upon individual device requirements, custom formulations can be developed to provide targeted lubricity, adhesion and thickness levels.

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