

ISurGlide® Hydrophilic Coating Products

Reduced Coefficient of Friction 0.01 - 0.05

Applicable to Many Substrates: PEBA_X of all durometers
Nylon
HDPE/LDPE
Polyurethanes
PET, PC, and others

UV Cured for In Line Processing

Sold as 1L Ready to Use Solution

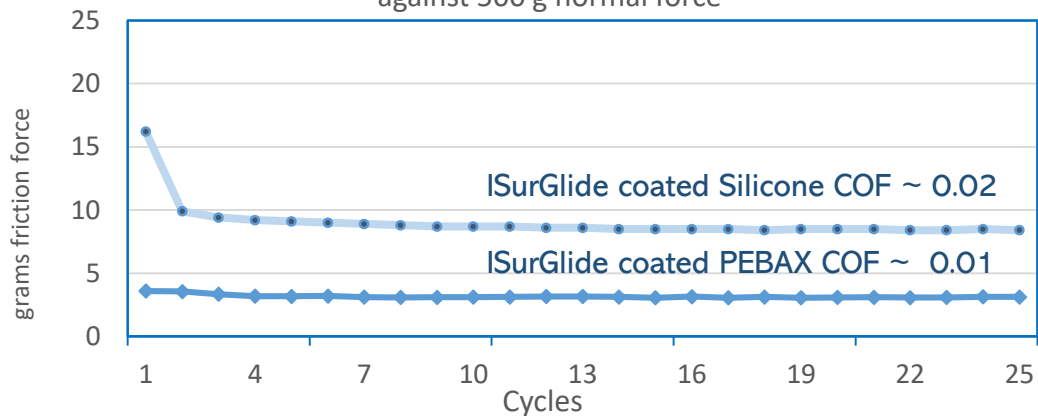
FDA Masterfile Available

Proven Biocompatibility

Commercially Available since 2007



Friction Testing over 25 Cycles
against 500 g normal force



ISurGlide® Typical Use

Coating Parameters

Dip insertion/extraction speed: 0.1 - 4.0 cm/sec
Dwell Time: 0-60 sec
Dry Time: Dependent on device geometry
UV Cure: 0.5 - 5.0 min

Layers

Optional primer layer
1-2 ISurGlide layers depending on application

Coating Equipment

HMS PCX Coating System compatible
Tech transfer to in house manufacturing equipment

UV Equipment

Mercury Metal Halide
Fluorescent UVB or UVC
LED < 330 nm

Sterilization

Ethylene oxide (EtO) or gamma recommended

Shipping

Coating Solution shipped FedEx ground hazardous
Solution samples supplied for customer testing with each lot
Certificate of Analysis supplied
SDS supplied, GHS compliant

Recommended Testing

Friction Testing

Recommended Friction Testing : HMS FTS6000
500 grams normal force
4+ cm test area
silicone 80D pads
25+ cycles
1 cm/sec velocity, 0.1 sec acceleration time
COF <0.05, <10% variance between first and last cycle

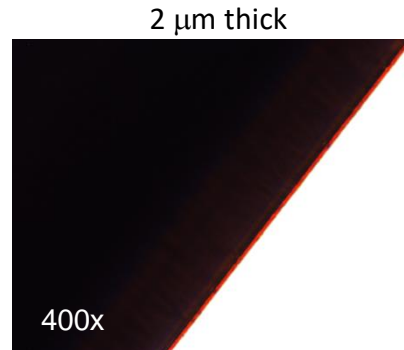
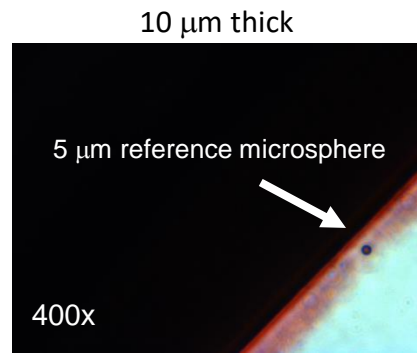
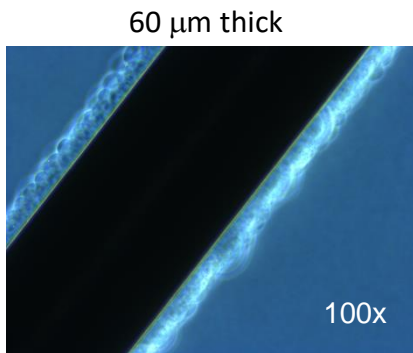
Staining

Congo Red staining, 0.35% aq solution

Optical Microscopy

Phase contrast aqueous microscopy for coating visualization

Hydrated ISurGlide® Surfaces Up Close



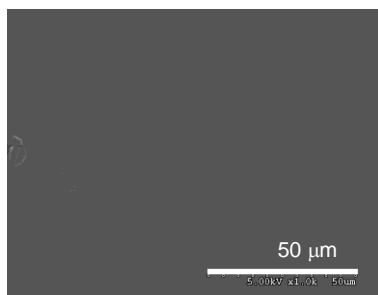
Stained with Congo Red dye to visualize coating

Hydrated Hydrophilic Coatings can range from 2 to 60 μm thickness

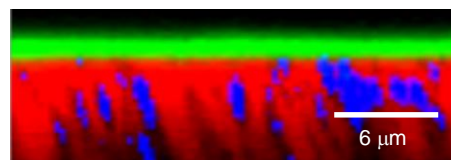
Primers range from 1 to 2 μm thickness

Depending on processing parameters and coating choice

Smooth Uniform Coatings upon Surface Characterization



SEM of PhotoPrime SR 330



Confocal Raman microscopy

Green is PhotoPrime SR

Red is Silicone Rubber

Blue is Barium Sulfate

Coming soon ...

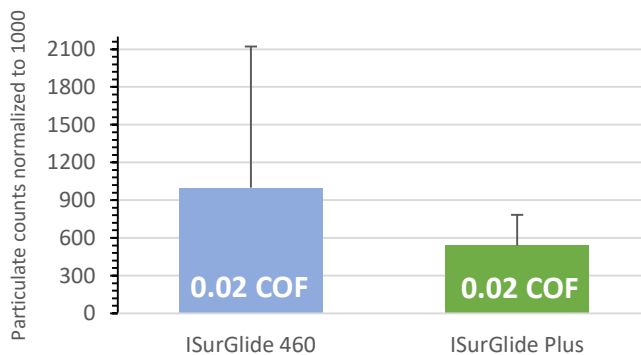
ISurGlide® Plus

ISurGlide® coatings are ideal for any application requiring a slippery, hydrophilic, or wettable surface.

- Single Coat Solution
- Same Coefficient of Friction
- Lower Particulate



ISurGlide Plus vs ISurGlide 460 on PEBAX



PEBAX®
Nylon/Grilamid®
HPDE
PET

In-line manufacturing Pre-mixed; ready to use
FDA Master File