

TECHNICAL DATA SHEET

Silube® 550

Silicone Urethane Polymer

### **DESCRIPTION**

**Silube**<sup>®</sup> **550** is a 40% active high molecular weight Silicone-Urethane hybrid polymer that is primarily used to impart water repellency, soil resistance and softness to materials.

### **TYPICAL PROPERTIES**

Appearance	Clear Liquid
Colour, Gardner	1
Viscosity at 25°C, cps	4,500
Solids content, %	40
Solvent	Isododecane
Refractive Index at 25°C	1.418
Diluents	IPA, Aromatic Solvents, Isododecane

### **APPLICATION & USES**

**Silube 550** is used in solvent-based coatings to impart water repellency, soil resistance and softness. Typical substrates that can be coated to obtain the above benefits include leather, textiles and hard surface materials.

Depending on the applications and the coated substrate, the amount of **Silube 550** used ranges from 0.5%-5.0% weight percent based on the total formulation.

### **Application Testing**

**Silube 550** was compared for water and stain resistance properties with Siltech<sup>®</sup> E-2150, a water-based water proofing emulsion, and the control with no treatment.

To conduct the water resistance evaluation, the solutions are absorbed onto cotton panels and dried. The treated panels are subjected to 200 mL of water with no hydrostatic pressure. The run-through, run-off and pick-up of the water were measured and AATCC ratings assigned. See Water Repellence chart below.

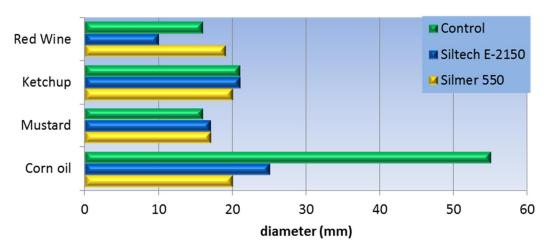
# Water Repellence



**Silube**<sup>®</sup> **550** performed much better than the control and the water-based treatment for water resistance. Silube 550 had only 1% pickup and over 80% run-off. AATCC ratings were 0 for the control, 65 for the Siltech<sup>®</sup> E-2150 and 80 for the **Silube 550**.

To conduct the stain resistance evaluations, four stains were evaluated. Mustard, Ketchup, Corn Oil and Red Wine were placed on treated cotton panels, pressed overnight and then washed with a detergent solution. These panels were dried and the diameter of the remaining stain was measured and reported in mm. Water based-stains were not improved, but in the case of the oil-based corn oil, the stain from the **Silube 550** treated panels were much smaller and very faint. See Stain Resistance Chart.

## Stain Resistance



Softness was evaluated by hand panel and the control was given a 1 rating, while the **Silube 550** treated panel was given a 7 showing good softness.

### SHELF LIFE

When stored in the original, unopened containers between 10 and 40°C, **Silube 550** has a shelf life of 36 months from date of manufacture.

#### **PACKAGING**

**Silube 550** is supplied in 15kg pails and 170kg drums.

### LEGAL DISCLAIMER

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