



ADVANCED POLYMER, INC.

GET THE API ADVANTAGE . . .

API-BI795

API's API-BI795 is a blocked urethane pre-polymer that can be defined as an isocyanate reaction product, which is stable at room temperature but dissociates to regenerate isocyanate functionality under the influence of heat.

Temperatures between 120°C and 180°C are necessary to release the blocking agent, which will volatilize from the coating. The resulting isocyanate can react with other active hydrogen-containing compounds to form more thermally stable urethane or urea linkages. API-BI795 blocked urethane pre-polymer can be added directly to most waterborne formulations with mild agitation. Blocked urethane pre-polymer may be utilized in coatings for wood, leather, inks, adhesives, textiles and waterborne coatings for metal.

CHARACTERISTICS & BENEFITS

- Excellent wash durability for fluoropolymer treated fabric; retaining water and oil repellency performance
- Long term pot-life in aqueous systems
- Excellent compatibility due to its non-ionic nature
- Excellent adhesion to substrates
- Curing temperatures 120°C - 180°C

PERFORMANCE DATA

The following is an illustration of API-BI795 durability evaluation in conjunction with APG-5206, a waterborne C8 based fluoropolymer emulsion. In a concentrated formula the active content of APG-5206 was kept constant at 20% actives, while the BI-795 was varied from 0 to 4% active content. Bath formula was diluted to 1% actives based on the fluoropolymer active ingredient.

Application Conditions:

Substrate: Cotton/Poly (50/50)
Apply via pad @ 40 psi
Dry & Cure @ 325°F x 4 min

Test & Wash Conditions:

AATCC Test Method 193
Water Temp @ 60°C
Water Level @ 12 Gal
Wash Type: Regular
Dry Type: Medium @ 40 min

TYPICAL PROPERTIES

Appearance:	Viscous White Emulsion
Solid Content:	15-25%
Dissociation Temperature:	≥120.C°
pH:	6
Specific Gravity (@ 25°C):	1.1

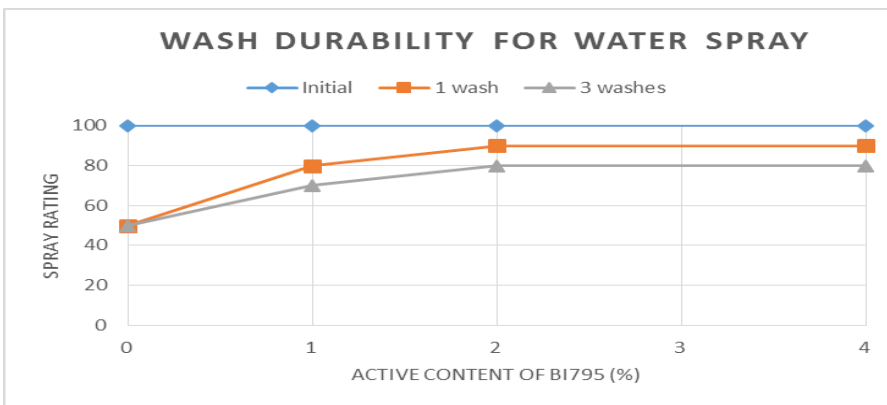
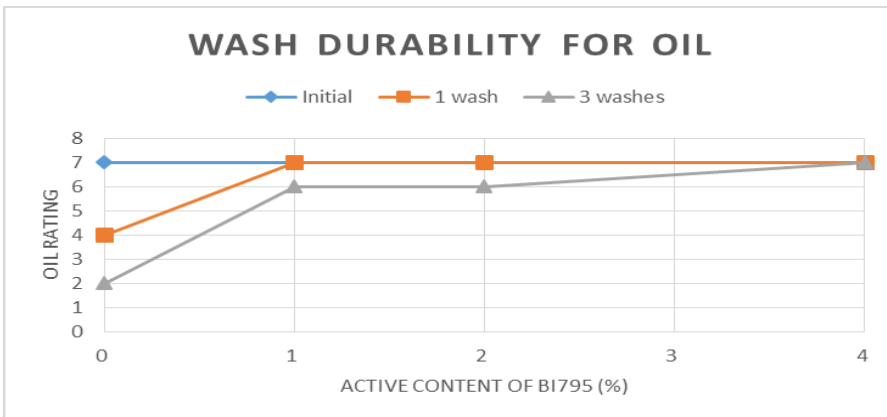
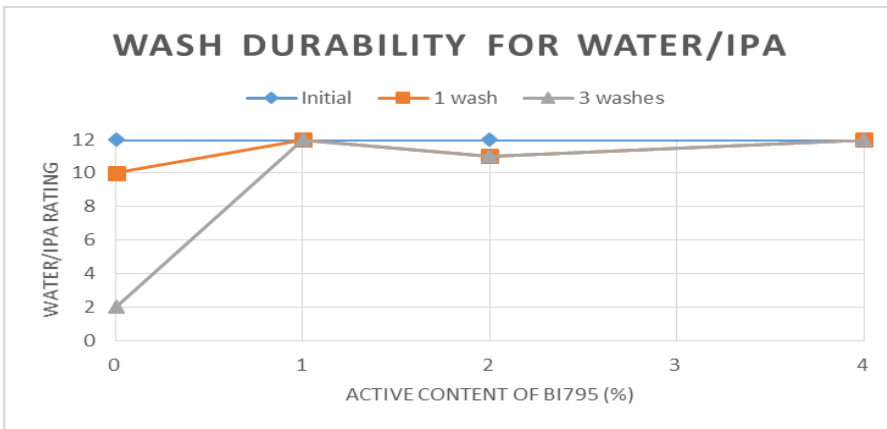
Advanced Polymer, Inc.
400 Paterson Plank Road
Carlstadt, NJ 07072
Phone: (201) 933-0600
Fax: (201) 933-8442
www.advpolymer.com



ADVANCED POLYMER, INC.

GET THE API ADVANTAGE . . .

API-BI795



PACKAGING

API-BI795 is available in 8 oz. samples and 397-lb. drums.

Advanced Polymer, Inc.

400 Paterson Plank Road

Carlstadt, NJ 07072

Phone: (201) 933-0600

Fax: (201) 933-8442

www.advpolymer.com