

### Urethane; Polyurethane: Waterbase Aliphatic Solvent less Polyester Dispersion no NMP solvent

#### AQUENCE PI SF18

#### PRODUCT DESCRIPTION:

**AQUENCE PI SF18** is a translucent aliphatic waterbased urethane resin that contains no solvent and has good physical properties without the use of cross linkers. **AQUENCE PI SF18** is a single component that must be coalesced with solvents, resins, or additives to form a good film. **AQUENCE PI SF18** provides good chemical and abrasion resistance when properly formulated.

#### APPLICATIONS:

- Wood Coatings
- Concrete Coatings
- Metal Coatings
- Base Polymer for OEM Paint
- Exterior Paint

#### BENEFITS:

- Solvent less **AQUENCE PI SF18** allows formulator latitude in choosing the correct co-solvent for the application
- Extremely low VOC\_coatings can be developed from **AQUENCE PI SF18**
- Coatings that need quick tack free properties can be formulated with **AQUENCE PI SF18**
- OEM coatings will cure with tack free hand with lack of NMP in the dispersion.

**STORAGE AND HANDLING:** Store between 55 to 95°F. Consult MSDS Sheets prior to working with the material.

**CLEAN UP:** Soap and water. All applicators and utensils must be thoroughly cleaned prior to use. For further information, refer to the MSDS Sheet.

**WARNING: Refer To the MSDS Sheet**

#### TECHNICAL INFORMATION:

% Solids	34-36%
Viscosity, cps @ 25°C	25 - 400
Specific Gravity	1.06 ± 0.01
Wt./Gallon	8.75 lbs ± .2
pH	7.75 ± 0.75
VOC Grams/Liter	< 50 g/l

#### Typical Properties: (formulated film)

CS10 Wheel <sup>1</sup>	10mg
Hardness (Sward 1 wk)	25
Tensile Strength <sup>2</sup>	3500
Elongation <sup>2</sup>	200%

#### FORMULATING:

**AQUENCE PI SF18 does not** film form at room temperature. **AQUENCE PI SF18** may be further crosslinked with carbodimide or aziridine. **AQUENCE PI SF18** is generally compatible with Henkel QW resin series or a variety of acrylic resin emulsions.

#### TEST METHODS (ASTM Method)

% Solids - D-2369	Hardness - D-2134	Viscosity - D-2196
Abrasion - D-4060	Appearance - E-284	pH- E-70
Tensile - D-412	Elongation - D-412	VOC Properties - D-3960
Weight/Gallon - D-1475		

<sup>1</sup>Taber Abrasion Weight Loss 1000 gram load/1000 cycles

<sup>2</sup>Instron tester; films pulled at 2 inches per minute

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