



A Step Ahead...

# QUAKER COLOR

DIVISION OF McADOO & ALLEN, INC.

201 S. HELLERTOWN AVENUE P.O. BOX 219  
QUAKERTOWN, PENNSYLVANIA 18951-0219  
(215) 536-3520 FAX (215) 536-6464  
www.quakercolor.com

## Technical Data Sheet

Product Code: AB-70F

### DESCRIPTION

AB-70F is high performance aliphatic polyester urethane dispersion. The unique balance between hardness and flexibility makes it suitable for applications for plastic, metal, wood and concrete coatings. It could be used as a one component or crosslinked through COOH functional groups to form high chemical and UV resistant coatings.

### APPLICATIONS

- Interior and exterior automotive plastics
- Consumer electronics such as cellular phones, computers and TV housing
- Wood coatings
- Other applications requiring high chemical and UV resistance

### FEATURES

- Excellent chemical and stain resistance
- Excellent water resistance
- Excellent hardness- flexibility balance
- Low VOC, below 50 g/l

### PROPERTIES

Appearance	Clear Liquid
Percent Solids, weight	39 +/- 2
Specific Gravity, 25°C	1.04
pH, typical value	8.5
Viscosity, cPs	max 60
Freeze Thaw Stability	Passes 5 cycles

### STORAGE

Store in a cool, dry place, preferably less than 80°F, to ensure a useful shelf life of 18 months. Protect from freezing. Mix before use.



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## STARTING POINT FORMULATION

Material Component 1	Lbs.	Supplier
AB-70F	100.00	Quaker Color
TEGO 901W	0.50	Degussa
BYK347	0.50	BYK-Chemie
TS-100	3.00	Degussa
Rheolate 300	1.00	Aqualon
OTL-Blue-50	20.00	Quaker Color
<b>Crosslinker</b>		
Rhodocoat WAT4	5%	Rhodia

## TEST RESULTS

Clear Films, no crosslinker, 7 days ambient cure

<b>Hardness</b>	<b>Sward</b>	20	<b>Pencil</b>	H		
<b>Mechanical Properties</b>	<b>Tensile</b>	5000	<b>Elongation</b>	750	<b>Modulus</b>	1000

**Pigmented Films:** 30 min at 76°C and 3 days ambient cure, 5% Isocyanate Crosslinker

DFT 1.5 mils PC Substrate	AATCC/ISO 105 Grey Scale	5 Finger Scratch test			
		2N	5N	8N	13N
Dry Cloth	5	-	-	-	-
Windex x 10 DR	5	-	-	-	-
Fantastic x 10 DR	5	-	-	-	-
Formula 409 x 10DR	5	-	-	-	-
Suntan @74°C x 1hr		8N, pass			

## Weatherometer Exposure- SAE 1885 Automotive Interior Specifications

(No UV package added)

1250 KJ	$\Delta 60^\circ$ gloss $\leq 2$	$\Delta E$
AB-70F/Isocyanate	0.6	0.5

Quaker Color manufactures all its products under carefully controlled conditions to meet rigid specifications. The values given in this publication are typical values intended as guidelines for the use of the products, they are not specifications. It is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficacy and safety. Should you require the actual specifications currently enforced on specific products contact your Quaker Color representative for the appropriate information.