



## PHYSICAL PROPERTY

## TEST RESULTS

**ASTM D 6083-97a is the Standard Specification for Liquid Applied Acrylic Coatings used in Roofing**

ASTM TEST	6083-97a REQ'MT	FORCE CERAMIC SATIN	ULTRA PRIME™	ULTRA SEAL™	ULTRA SATIN™	ULTRA KOTE™	ULTRA KOTE XL™	SNOWWRITE™	INSULKOTE™	PERMABOND™	PERMAKOTE®	PERMAKOTE PLUS®	PERMAKOTE SEMI-GLOSS®
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### I. Colloidal Properties

Viscosity (KU)	D 562	85-141	105.9	99.9	110.5	118.8	107.0	110.2	115.4	128.4	99.9	117.3	118.6	118.8
Volume Solids (% calculated) <sup>3</sup>	D 2697	>50	35.7	35.2	46.8	41.2	47.5	47.9	43.4	43.9	35.2	43.8	49.3	41.2
Weight Solids (% calculated) <sup>3</sup>	D 1644	>60	51.4	40.6	65.7	51.0	67.2	58.6	61.5	62.8	40.6	62.3	63.5	51.0

### II. Mechanical Properties of the Film **Tensile-Elongation Testing Conditions:** 1/2" sample width, 1" jaw separation, 1"/minute speed of pull

#### A. After 14 Days Drying in Standard Lab Conditions

Tensile Strength <sup>1</sup> @73°F	D 2370	>=200 lb/in <sup>2</sup>	380	65	397	414	382	267	303	320	65	461	333	414
Elongation <sup>1</sup> at Break @73°F	D 2370	>=100 %	410	2642	410	562	374	693	483	406	2642	308	639	562

#### B. After 1,000 Hours Aging in a Xenon Arc Weatherometer

Elongation <sup>1</sup> at Break @73°F	D 2370	>=100 %	57	2279	192	501	172	636	124	127	2279	200	398	501
Flexibility @ -15°F (1/2" mandrel)	D 522	Pass	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Pass	Fail	Fail
Accelerated Weathering (cracking/checking)	D 4798	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

### III. Other Properties of the Film

Wet Adhesion <sup>2</sup> (Polyurethane Foam)	C 794/D 903	>2 lb/in	0.03	0.89	0.19	0.08	0.05	0.02	0.02	0.01	0.89	0.01	0.12	0.08
Wet Adhesion <sup>2</sup> (Galvanized Metal)	C 794/D 903	>2 lb/in	2.03	3.92	5.56	5.38	2.90	4.35	1.32	0.21	3.92	3.04	3.55	5.38
Tear Resistance <sup>1</sup> (Die C)	D 624	>60 lbf/in	144.1	29.1	137.0	154.4	137.7	134.1	135.0	121.5	29.1	118.8	142.5	154.4
Permeance <sup>2</sup> (Inverted)	D 1653A	<50 perms	No Data	3.2	19.6	24.4	20.1	12.8	88.4	56.2	3.2	30.5	12.8	24.4
Permeance (Upright)	D 1653A	NR	32.2	3.9	17.2	16.4	20.5	7.8	26.3	26.8	3.9	12.8	11.2	16.4
Water Swelling <sup>1</sup>	D 471	<20 weight %	22.4	37.6	11.6	38.4	11.1	44.7	17.2	14.7	37.6	14.0	23.2	38.4
Fungi Resistance	G 21	Zero	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

### IV. Other Non-Required Test Results

Dry Adhesion <sup>2</sup> (Polyurethane Foam)	C 794/D 903	NR	0.23	3.20	1.35	1.31	1.77	1.74	0.54	0.37	3.20	0.46	1.82	1.31
Dry Adhesion <sup>2</sup> (Galvanized Metal)	C 794/D 903	NR	0.69	4.40	11.72	4.45	4.38	6.25	1.11	0.42	4.40	3.84	5.63	4.45

NT = Not Tested

NR = Not Required for ASTM D 6083-97a

<sup>1</sup> Only Three Specimens Tested

<sup>2</sup> Only Two Specimens Tested

<sup>3</sup> Calculated by NCCMI

TESTING PERFORMED by: B.A.S.F. Corporation

### V. ENERGY STAR® Required Test Results

Solar Reflectance	E 903	NR	NT	NT	NT	NT	83.0%	81.7%	83.7%	81.5%	NT	82.7%	81.3%	NT
Near-Normal Emittance Calculated (Emissivity)	E 408-71	NR	NT	NT	NT	NT	0.94	0.93	0.94	0.94	NT	0.93	0.94	NT

TESTING PERFORMED by: Atlas Weathering Services Group

### VI. NATIONAL FIRE PROTECTION ASSOCIATION 101 LIFE SAFETY CODE Fire Rating Test Results

Fire Rating	E 84-01	NR	NT	NT	Class A	NT	NT	NT	NT	NT	NT	Class A	Class A	NT
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TESTING PERFORMED by: Commercial Testing Company