

## **DATA SHEET**

### **ACRYLIC EMULSION**

### **Description**

**EPS 2708** is an all-acrylic emulsion designed for high alkaline applications. It can be used as a polymer admixture for cement-based products or as a binder for coatings and primers over cementitious substrates.

- ✓ High alkali stability
- ✓ Exceeds bond strength requirements per ASTM C-1059-91, wet and dry
- ✓ Improves flow of cement based systems
- ✓ Improves flexural strength and modulus of elasticity per ASTM C-580
- ✓ Reduces permeability of cement matrices

**EPS 2708** can also be used for Porch and Deck paints and can be formulated at < 50 g/l VOC. For garage floor coatings, EPS recommends EPS 2293.

- ✓ Can be formulated for Porch and Deck Paints under 50 g/l VOC
- ✓ Excellent abrasion resistance and adhesion
- ✓ Excellent balance of flexibility and hardness

<u>Specifications</u>
<u>Suggested Coalescing Solvent(s)</u>
(% Solvent on Binder Solids – Pass 40°F LTC Test)

Weight Solids:  $50.0 \pm 0.7\%$  Texanol 6 - 8%

Weight/Gallon: 8.80 ± 0.10

*pH:* 8.0 – 9.0

Typical Properties Suggested Formulations

Volume Solids: 47.2 ± 0.7% EPS 2708 TG1 - Low VOC (< 50g/l) Floor Paint

MFFT: 20°C Bond Strength Data

Acid Value (on solids): 13 EPS 2708 BT1 - Low VOC Interior High Quality Flat

Volatile(s): Water (49.85%); EPS 2708 BT1 - Low VOC (< 100g/l) Exterior Flat

Ethanol (0.06%); EPS 2708 BT1 - Low VOC (< 150 g/l) Exterior Semi-Gloss

Ammonia (0.09%)

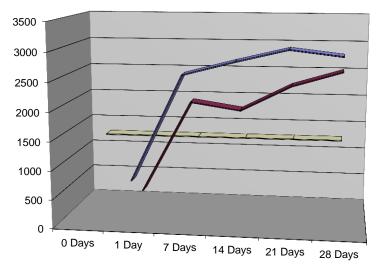
05-08-2014

#### Questions? Call EPS Technical Service @ 1-800-601-8111



DATA TABLE					
		EPS 2708		COMPETITOR	
CURE TIME	STRENGTH*	FRACTURE COMMENTS**	STRENGTH*	FRACTURE COMMENTS**	
1 DAY (dry)	820 psi	20% of the bonding material adhering to the bond face	420 psi	All specimens broke at the interface	
7 DAY (dry)	2630 psi	Specimens broke in the mortar	2040 psi	Average 5% of the bonding material adhering to the bond face	
14 DAY (Immersed in saturated lime water per method)	2860 psi	Specimens broke in the mortar	1910 psi	Average 20% of the bonding material adhering to the bond face One specimen broke at interface	
21 DAY (Immersed in saturated lime water per method)	3070 psi	Specimens broke in the mortar	2350 psi	Average 23% of the bonding material adhering to the bond face	
28 DAY (Immersed in saturated lime water per method)	2970 psi	Specimens broke in the mortar	2610 psi	Average 20% of the bonding material adhering to the bond face	

EPS 2708
Bond Strength (psi) ASTM C 1042





Specimens, which broke at the interface, demonstrate adhesive failure at the interface between the slurry and the mortar. Specimens, which broke with material adhering to the bond face, indicate cohesive failure in the slurry. Specimens, which broke in the mortar, indicate cohesive failure in the mortar.

Note: See Technical Bulletins, Polymer Admixtures for additional information on performance with cement matrices

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<sup>\*</sup> Each data point represents three specimens. Specimens cast per ASTM C 1042 type II lattices. A 5000-psi mortar substrate was sandblasted, then coated dry with cement polymer slurry. This slurry consisted of polymer at 25% solids and cement, at a ratio of 2 parts cement to 1 part polymer emulsion by weight. Fresh mortar was then placed directly on the slurry surface. Samples were air cured at 73° F (23°C) and 50% relative humidity in the molds for seven days. The samples were then de molded and immersed in saturated limewater for the remainder of the test.

<sup>\*\*</sup> Fracture comments indicate the type of break observed by the tester.



## SUGGESTED FORMULATION

FORMULA: EPS 2708 TG1 (08/29/07)
LATEX PORCH AND DECK PAINT
UNDER 50 G/L VOC LIGHT GRAY WITH TIO2 SLURRY

Pounds	<u>Gallons</u>	Raw Material	<u>Supplier</u>	Instructions
100.0	12.00	Water	A = l= l = -= -l	Add with good agitation.
2.0	0.18	Natrasol 250 MBR	Ashland	
9.2	1.00	Tamol 731	Dow	
1.0	0.13	Ammonia Hydroxide	_	
3.0	0.34	Triton NP-9	Dow	
2.0	0.26	Drewplus L-475	Ashland	
5.0	0.15	Attagel 50	BASF	
175.0	8.05	Minex 4	Unimin	Grind to 4+ NS.
25.0	3.00	Water		Add if needed otherwise add to
1 -4-1				the grind
<u>Letdown</u>				
115.3	13.84	Water		
131.6	6.75	TiO2 Slurry		
2.0	0.21	Nuosept 95	Ashland	
2.3	0.25	Ethylene Glycol		
440.0	50.0	EPS 2708	EPS	Add with good agitation. Mix 10
				minutes
3.0	0.39	Drewplus L-475	Ashland	
9.0	1.14	Texanol		Add grind. Mix 10 minutes
4.4	0.50	EPS 9147	EPS	Mix 10 minutes
8.0	0.89	RM-8W	Dow	Mix 20 minutes
6.0	0.96	Polyphase AF-1	Troy	
<u>5.0</u>	<u>0.46</u>	Novocolor 8091 Black	CCA	Mix 20 minutes
1048.8	100.05	Totals		

#### Formulation Parameters

Weight Solids	49.5	%
Volume Solids	36.6	%
Weight / Gallon	11.44	#/gal
Pigment Volume Conc.	32.8	%
Pigment / Binder	1.31	
VOC	47	g/l
	0.39	# / gal

#### Typical Paint Properties

Viscosity (Stormer)	90 – 95 KU
pН	8.0 - 9.0
Gloss 60 degrees	8 – 12
Sheen 85 degrees	10 - 15

#### **Application Methods**

Brush, Roller, Airless Spray

02-24-2011

#### Questions? Call EPS Technical Service @ 1-800-601-8111



## SUGGESTED FORMULATION

FORMULA: EPS 2708 BT1 WHITE (9/12/06)

LOW VOC INTERIOR LATEX FLAT (UNDER 100 G/L) BT-1

<u>Pounds</u>	<u>Gallons</u>	Raw Material	<u>Supplier</u>	Instructions
150.0	18.00	Water		Add with good agitation.
2.0	0.21	Nuosept 95	Ashland	
4.0	0.40	Tamol 1124	Dow	
2.0	0.25	AMP-95	Dow	
3.0	0.34	Triton NP-9	Dow	
2.0	0.26	Drewplus L-475	Ashland	
3.0	0.15	Attagel 50	BASF	
200.0	5.86	Ti-Pure R706	Du Pont	
100.0	4.55	Satintone W	BASF	
125.0	5.56	Duramite		
25.0	1.36	Diafil 530	World Minerals	Disperse Agglom Free
150.4	18.06	Water		
24.1	2.6	Ethylene Glycol		
2.0	0.18	Natrasol 250 MBR	Ashland	Mix 30 minutes
325.6	37.00	EPS 2708	EPS	Mix 5 minutes
				Add grind.
9.9	1.25	Texanol	Eastman	
3.0	0.39	Drewplus L-475	Ashland	
20.0	2.18	RM-2020	Dow	Add slowly mix 20 minutes
6.0	0.68	TT-935	Dow	Premix w/water add slowly
<u>6.0</u>	<u>0.72</u>	Water		To desire viscosity mixing 30
				minutes
1166.00	100.00	Totals		

#### Formulation Parameters

weight Solias	55.2	%	
Volume Solids	37.4	%	
Weight / Gallon	11.66	# / gal	
Pigment Volume Conc.	50.3	%	
Pigment / Binder	2.74		

VOC 98 g/l 0.83 #/Gal

### Typical Paint Properties

Viscosity (Stormer)	88 – 93 KU
рН	8.5 - 9.2
Color	White
Gloss @ 60	2.8
Sheen @ 85	2.7
ICI viscosity (poise)	1.3 – 1.5

### Suggested Application Methods

Brush, Roller, Airless Spray

05-12-2008

#### Questions? Call EPS Technical Service @ 1-800-601-8111



## SUGGESTED FORMULATION

FORMULA: EPS 2708 (09/12/06)

LOW VOC EXTERIOR LATEX FLAT (UNDER 100 G/L) BT1

<b>Pounds</b>	<u>Gallons</u>	Raw Material	<u>Supplier</u>	<u>Instructions</u>
104.0	12.5	Water		Add with good agitation.
11.6	1.25	Ethylene Glycol		
4.0	0.40	Tamol 1124	Dow	
5.0	0.57	Triton NP-9	Dow	
2.0	0.26	Drewplus L-475	Ashland	
3.0	0.15	Attagel 50	BASF	
220.0	6.30	Ti-Pure R706	Du Pont	
200.0	9.20	Minex -4	Unimin	
25.0	1.36	Diafil 530	World Minerals	Disperse Agglom Free
178.34	21.41	Water		33
2.0	0.26	Nuosept 95	Ashland	
4.0	0.36	Natrasol 250 MBR	Ashland	Mix 5 minutes
2.0	0.27	Ammonia 6.8%		Mix 30 minutes
369.6	42.0	EPS 2708	EPS	
15.04	1.90	Texanol	Eastman	
3.0	0.39	Drewplus L-475	Ashland	
5.5	0.60	RM-2020	Dow	Add slowly mix 20 minutes
<u>8.0</u>	<u>0.82</u>	Polyphase AF-1	Troy	Mix 20 Minutes
1162.08	100.00	Totals		

#### Formulation Parameters

Weight Solids	56.34	%
Volume Solids	38.75	%
Weight / Gallon	11.62	# / gal
Pigment Volume Conc.	46.5	%
Pigment / Binder	2.38	
VOC	89	g/l
	0.74	# / Gal

#### **Typical Paint Properties**

( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	3 – 93 KU 8 – 9.2
p	o – 9.2 /hite
Gloss @ 60 2	- 3
	- 3
ICI viscosity (poise) 1.	2 – 1.5

### Suggested Application Methods

Brush, Roller, Airless Spray

11-22- 2011

#### Questions? Call EPS Technical Service @ 1-800-601-8111



## SUGGESTED FORMULATION

FORMULA: EPS 2708 (09/12/06)

LOW VOC EXTERIOR LATEX SEMI-GLOSS (UNDER 150 G/L) BT1

<b>Pounds</b>	<u>Gallons</u>	Raw Material	<u>Supplier</u>	<u>Instructions</u>
108.3	13.00	Water		Add with good agitation.
1.0	0.09	Natrasol Plus	Ashland	
5.0	0.51	Tamol 1124	Dow	
4.0	0.45	Igepal CO-630	Rhodia	
2.0	0.26	Drewplus L-475	Ashland	
3.0	0.15	Attagel 50	BASF	
250.0	7.16	Ti-Pure R706	Du Pont	
144.7	17.37	Water		
25.5	2.75	Ethylene Glycol		
2.0	0.21	Nuosept 95	Ashland	
1.0	0.09	Natrasol Plus	Ashland	Mix 5 minutes
2.0	0.27	Ammonia 6.8%		Mix 30 minutes
448.8	51.00	EPS 2708	EPS	Mix 10 minutes
3.0	0.39	Drewplus L-475	Ashland	
18.2	2.30	Texanol	Eastman	
9.0	1.00	RM-8W	Dow	
20.0	2.18	RM-2020	Dow	Add slowly mix 20 minutes
8.0	0.82	Polyphase AF-1	Troy	Mix 20 Minutes
1055.5	100.00	Totals		

### Formulation Parameters

#### Typical Paint Properties

Weight Solids	47.95	%	Viscosity (Stormer)	88 – 93 KU
Volume Solids	33.74	%	pH	8.8 - 9.2
Weight / Gallon	10.55	# / gal	Color	White
Pigment Volume Conc.	23.63	%	Gloss @ 60	55 - 65
Pigment / Binder	1.11			
VOC	148	g/l	ICI viscosity (poise)	1.2 - 1.5
	1.23	# / Gal	<b>,</b> , ,	

#### Suggested Application Methods

Brush, Roller, Airless Spray

11-22-2011

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