

EPS® 2293

Suggested Formulation

DESCRIPTION

EPS® 2293 is a self-crosslinking all-acrylic emulsion offering excellent adhesion and early water resistance for use in clear sealers over tiles and cementitious substrates. Clear and pigmented coatings can be formulated at less than 100 g/l VOC. EPS 2293 offers excellent performance in exterior stain formulations for deck and wood applications, and garage floor paint

PROPERTIES

- Exceptional blush resistance
- Exceptional chemical resistance
- Exceptional early water resistance
- Exceptional wet and dry adhesion to wood, tiles, glass, and cementitious substrates
- Excellent gloss development and gloss retention
- Excellent exterior durability
- Excellent abrasion resistance
- Excellent performance as a wood stain
- Low temperature film formation (10 mils at 38°F)
- <100g/L VOC capable
- Made without APEO surfactants

Specifications

Weight Solids	40.0 ± 0.7%
Weight/Gallon	8.70 ± 0.10
pH	8.0 – 9.0

Typical Properties

Volume Solids	37.0 ± 0.7%
MFFT	< 10° C
Volatile(s)	Water

Suggested Coalescing Solvent(s)

(% Solvent on Binder Solids – Pass 40°F LTC Test)

Texanol in clears	6%
Texanol in pigmented paints	10%

Questions? Call EPS Customer Service @ 1-800-654-4242 / Email: info@eps-materials.com

1/28/2021

TECHNICAL SUPPORT: These guidelines are offered to assist the paint formulator in achieving the high performance properties noted and are offered for illustration purposes only; the paint formulator bears sole responsibility for the performance of the final coating product.

SDS: For details on health, safety and handling information, Safety Data Sheets (SDS) are available at www.epscca.com.

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. EPS assumes no obligation or liability for use of this information. UNLESS EPS AGREES OTHERWISE IN WRITING, EPS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR FREEDOM FROM PATENT INFRINGEMENT. EPS WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. Unless otherwise agreed in writing, all sales of EPS products are governed by the EPS Terms and Conditions of Sale, available at <https://www.epscca.com/galleries/pdfs/salesterms.pdf>.

Formulating Guidelines

Dispersants/Surfactants

- Recommended dispersants for paints include Tamol 731, Disperse-Ayd W-22, and BYK 152 or BYK 156
- Recommended surfactants include Triton CF-10 for paints and Surfynol PSA-336 for clear sealers
Additional success in clear sealers has been seen with Surfynol 104A, 104BC, and 104E

Defoamers

- Drewplus L-475 is recommended for paints
- BYK 024 is recommended for clear sealers. Other polysiloxanes such as BYK 021, BYK 022 and BYK 028 have additional potential

Coalescents

- Texanol is the preferred coalescent. Preliminary testing has shown that EB also has potential

Rheological Modifiers

- A combination of RM-2020 and RM-825 have proven to provide a good balance between flow and leveling and also viscosity control and sag resistance in paints
- Optiflo L-100 at 1-5% by weight in clear sealers is effective in controlling run-off in horizontal applications where the substrate is not level. Care should be taken to avoid exceeding 25 seconds on a #2 Zahn cup, which may result in brush marks and improper flow and leveling

Preservatives

- "BIT" types are recommended as bactericides for in-can preservation. Lonza Proxel AQ and Troy Mergal K10N are recommended. It is mandatory that no formaldehyde be present
- "IPBC" types are recommended as dry film preservatives where ponding water may result. Fungitrol 940 has been shown to perform well

Flattening Agents

- BYK Ceraflour 1000 is the preferred flattening agent. Some settling will occur upon storage, but should be mixed in easily with light agitation. Ceraflour 1000 can be used at a rate of 10 lbs. to 20 lbs. per 100 gallons in clear sealers, depending on the level of flattening desired. It is essential that formaldehyde be avoided when choosing a flattening agent.
- Microspersion 31-35 from Micro Powders Inc. has proven to be effective also.

Stability

- The use of Potassium Tripolyphosphate is recommended for optimal shelf stability

Questions? Call EPS Customer Service @ 1-800-654-4242 / Email: info@eps-materials.com

1/28/2021

TECHNICAL SUPPORT: These guidelines are offered to assist the paint formulator in achieving the high performance properties noted and are offered for illustration purposes only; the paint formulator bears sole responsibility for the performance of the final coating product.

SDS: For details on health, safety and handling information, Safety Data Sheets (SDS) are available at www.epscca.com.

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. EPS assumes no obligation or liability for use of this information. UNLESS EPS AGREES OTHERWISE IN WRITING, EPS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR FREEDOM FROM PATENT INFRINGEMENT. EPS WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. Unless otherwise agreed in writing, all sales of EPS products are governed by the EPS Terms and Conditions of Sale, available at <https://www.epscca.com/galleries/pdfs/salesterms.pdf>.

Suggested Formulation

FORMULA: EPS 2293 FP1 (272 –8 –2) (10/14) - Gray Concrete Floor Paint - 50 g/L VOC

<u>Pounds</u>	<u>Gallons</u>	<u>Raw Material</u>	<u>Supplier</u>	<u>Instructions</u>
82.0	9.84	Water		Add raw materials under good agitation, water as needed
7.0	0.76	Tamol 731 N	Dow	.
3.0	0.34	Triton CF-10	Dow	
1.0	0.13	Drewplus L-475	Ashland	
75.0	2.19	R902	Chemours	
150.0	6.90	Minex 7	Sibelco	
2.0	0.10	Attagel 40	BASF	Grind
1.5	0.07	Potassium Tripolyphosphate		
552.5	63.14	EPS 2293	EPS	
5.0	0.55	Proxel AQ	Lonza	Add grind to letdown
1.0	0.13	Ammonium Hydroxide 28%		
9.33	1.00	Ethylene Glycol		
80.8	9.70	Water		
22.0	2.51	EPS 9147	EPS	
2.0	0.26	Drewplus L475	Ashland	
1.0	0.11	Acrysol RM-825	Dow	Add slowly, mix 20 mins
6.0	0.66	Acrysol RM-2020	Dow	Add slowly, mix 20 mins
7.84	0.77	8594 Carbon Black Colorant	EPS/CCA	
<u>5.22</u>	<u>0.33</u>	8576 Yellow Oxide Colorant	EPS/CCA	Mix 20 minutes
1014.19	99.49	Totals		

Formulation Parameters

Weight Solids	48.21%
Volume Solids	36.78%
Weight / Gallon	10.19 lb/gal.
Pigment Volume Conc.	28.74%
Pigment / Binder	1.05
VOC	34 g/L 0.28 lb/gal

Typical Paint Properties

Viscosity (KU)	80 - 85
pH	8.5 – 9.5
Color	Gray
Gloss: 60°	10 - 15

Suggested Application Methods: Brush, Roller

The use of formaldehyde-containing raw materials must be avoided. A mildewcide / algacide may be incorporated in regions where mildew growth is prevalent.

Questions? Call EPS Customer Service @ 1-800-654-4242 / Email: info@eps-materials.com

1/28/2021

TECHNICAL SUPPORT: These guidelines are offered to assist the paint formulator in achieving the high performance properties noted and are offered for illustration purposes only; the paint formulator bears sole responsibility for the performance of the final coating product.

SDS: For details on health, safety and handling information, Safety Data Sheets (SDS) are available at www.epscca.com.

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. EPS assumes no obligation or liability for use of this information. UNLESS EPS AGREES OTHERWISE IN WRITING, EPS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR FREEDOM FROM PATENT INFRINGEMENT. EPS WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. Unless otherwise agreed in writing, all sales of EPS products are governed by the EPS Terms and Conditions of Sale, available at <https://www.epscca.com/galleries/pdfs/salesterms.pdf>.