Commercial Performance Coatings

CPCPB431

High Solids Epoxy Topcoat (for interior use)

EPE-370

EPE-370 High Solids Epoxy Topcoat is a fast drying direct-to-metal, **interior** topcoat intended for industrial use on properly prepared steel, galvaneal, galvanized or aluminum surfaces. It is an excellent choice for a variety of interior end uses.

Currently it is only available via PPG mixed colors through one of our blend centers.

Features and benefits:

- Excellent corrosion and chemical protection
- Excellent adhesion, mar resistance, and flexibility
- Direct-to-metal application
- *Currently only available from PPG Blend Centers in mixed colors*

Associated Products:

- EPE-370 High Solids Epoxy Topcoat
- EPE-371 High Solids Epoxy Catalyst

Physical Constants: *All values are theoretical, depend on color and are Ready-to-Spray. Actual values could vary slightly due to manufacturing variability.*

Maximum VOC 3.5 System Recommendations

	EPE-370 Tints only	EPE-370/EPE-371 RTS
Percent solids (by weight)	74.6% – 81.3%	71.6% – 78.0%
Percent solids (by volume)	54.8% – 61.3%	53.1% – 58.3%
HAPs	≤ 2.1 lbs/gal	≤1.7 lbs/gal
Photo-chemically reactive	Yes	Yes
Flash Point: EPE-370 92°F (33°C) EPE-371 80°F (27°C)		
RTS Combinations:		
Volume Ratio	As Is	4 : 1
Applicable Use Category	Single-Stage Coating	Single-Stage Coating
VOC Actual	336 – 401 (g/L) 2.81 – 3.35 (lbs/gal)	359 – 411 (g/L) 3.00 – 3.43 (lbs/gal)
VOC Regulatory (less water less exempt)	339 – 404 (g/L) 2.83 – 3.37 (lbs/gal)	362 – 413 (g/L) 3.02 – 3.45 (lbs/gal)
Density	1594 – 1858 (g/L) 13.29 – 15.49 (lbs/gal)	1461 – 1671 (g/L) 12.18 – 13.93 (lbs/gal)
Volatiles wt. %	18.7 – 25.4	22.0 – 28.4
Water wt. %	0.3 – 0.4	0.2 – 0.4
Exempt wt. %	0.0	0.0
Water vol. %	0.5 – 0.7	0.4 – 0.6
Exempt vol. %	0.0	0.0

System recommendations that meet the advertised lowest VOC content guidelines. User must use components and mix ratios as indicated to meet VOC target.

Exceeds Maximum VOC 3.5 System Recommendations

	EPE-370/EPE-371 RTS 4:1:10% with non-exempt solvents
Percent solids (by weight)	66.4% - 72.1%
Percent solids (by volume)	47.4% - 52.2%
HAPs	≤ 2.1 lbs/gal
Photo-chemically reactive	Yes
Flash Point: EPE-370 92°F (33°C) EPE-371 80°F (27°C)	
RTS Combinations:	
Volume Ratio	4 : 1 : 10%
Applicable Use Category	Single-Stage Coating
VOC Actual	335 – 464 (g/L) 2.80– 3.87 (lbs/gal)
VOC Regulatory (less water less exempt)	370 – 465 (g/L) 3.09 – 3.88 (lbs/gal)

System recommendations that are not required to meet the lowest VOC recommendations advertised in this TDS, alternative mix components may be used as indicated. Review column VOC Regulatory (Less Water Less Exempts) values to determine expected VOC and compare to local applicable regulations.

EPE-370

Directions for Use

Substrate Preparation:

The surface to be coated must be free of all contamination (including dust, dirt, oil, grease and oxidation). Chemical treatment and the use of a conversion coating will improve the performance properties of the coating system. For optimum performance, EPE-370 should be applied over an approved CPC primer (Please see CPCTB01 Compatibility Chart). Variability can occur with substrates, preparation, application method or environment. We recommend that adhesion and system compatibility be checked prior to full application. For optimal performance, please refer to CPC Technical Bulletin CPCTB01

Substrate	Direct to properly treated substrate
Cold Rolled Steel	Excellent
Hot Rolled Steel	Excellent
Galvaneal	Fair – Good
Galvanized	Fair – Good
Aluminum	Good
Plastic / Fiberglass	N/A

Mix Directions:

Mix Directions: Thoroughly agitate component A on mechanical shaker prior to mixing. Stir thoroughly before and occasionally during use.

Thinning: Q70 (MAK) may be used in non-regulated areas. Use of thinner will raise the VOC above 3.50 lbs/gal.

Blend Ratio:	EPE-370		EPE371
	4	:	1

Pot Life @ 77°F (25°C):	8 hours
Spray Viscosity Range:	#3 Zahn - 9 seconds
Unopened Shelf Life: (each component)	EPE-370 = 4 years EPE-371 = 2 years

Application Equipment:

Conventional (with or without Pressure Pot):	1.3 - 1.8 mm fluid tip, 45 – 50 psi at the gun
HVLP (with or without Pressure Pot):	1.3 - 1.8 mm fluid tip, 10 psi at the tip
Airless:	.011 - .015 fluid tip, 2000 psi and up fluid pressure
Air-Assistd Airless:	.011 - .015 fluid tip, 1000 – 1500 psi fluid & minimum required air pressure to remove tails from pattern
Brush or Roll:	No recommendation
Electrostatic:	No recommendation

Application:

Apply:	1 – 2 coats
Recommended Wet Film Build:	2.6 – 4.7 mils
Recommended Dry Film Build:	1.5 – 2.5 mils
Square Foot Coverage @ 1.0 mil no loss:	851 – 935 sq. ft.

Dry Times:

Air Dry @ 77°F (25°C) 50% RH:	
To Touch	2 hours
To Handle	4 hours
To Dry	4 hours
To Recoat	4 hours
Force Dry @ 180°F (82°C):	Flash 10 minutes @ Ambient: 20 minutes @ 160°F (71°C) 30 minutes @ 140°F (60°C)

** Paint film is not fully cured for 7 days. Drying time listed may vary, depending upon film build, color selection, temperature, humidity and degree of air movement.*

EPE-370

Technical Data*

Performance Properties:

System:
BONDERITE® 1000 panels
EPE-370

Test	ASTM Method	Result
Gloss @ 60° Angle	D523	80 – 90
Pencil Hardness	D3363	≤ H
Adhesion	D3359	5B
In Service Temperature Limit**		300°F (149°C)

** *As you approach 300°F (149°C), depending on the pigmentation, the color may change, but the film integrity will be maintained up to 300°F (149°C).*

Chemical Resistance:

System:
***Bonderite* 1000**
EPE-370

Chemical	ASTM Method	Result
10% NaOH (Sodium Hydroxide)	D1308	Pass
10% HCl (Hydrochloric acid)	D1308	Slight Effect
10% H_2SO_4 (Sulphuric acid)	D1308	Slight Effect
Gasoline	D1308	Pass
Machine Oil	D1308	Pass
Water†	D1308	Pass

† *Although resistant to intermittent exposure, not recommended for immersion.*

Weather Resistance:

System:
***Bonderite* 1000**
EPE-370

	ASTM Method	Result
Salt Spray – 500 hours	B117	
Corrosion Creep	D1654	10A
Scribe Blisters	D714	None
Face Blisters	D714	None
Humidity – 100 hours	D2247	
5 Minute Recovery Adhesion	D3359	4B – 5B
1 Hour Recovery Adhesion	D3359	4B – 5B
24 Hour Recovery Adhesion	D3359	4B – 5B
QUV-UVB: 60° angle		
500 hour retention	D523	Not recommended for exterior UV exposure

All tests results assume proper cure and preparation of test substrates. Unless otherwise stated, all results were obtained spraying product direct to metal on *Bonderite* 1000 panels.

* The application and performance property data above are believed to be reliable based on laboratory findings. It is for the buyer to satisfy itself on the suitability of the product for its particular use. Variation in environment, procedures of use, or extrapolation of data may cause unsatisfactory results.

Miscellaneous:

For Interior Use only

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Health and Safety:  Please refer to Material Data Safety Sheets (MSDS) for full health safety details and storage regulations.

See Material Safety Data Sheet and Labels for additional safety information and handling instructions.

EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION (412) 434-4515. IN CANADA (514) 645-1320.
Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to PPG Industries. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does PPG Industries warrant freedom from patent infringement in the use of any formula or process set forth herein.

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PPG Industries
19699 Progress Drive
Strongsville, OH 44149
1-800-647-6050

PPG Canada Inc.
2301 Royal Windsor Drive, Unit #6
Mississauga, Ontario L5J 1K5
1-888-310-4762

www.ppgcommercialcoatings.com

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