



# Corabond® Expanded Bake Structural Adhesive



## It's all about that bake



### Introducing PPG's CORABOND® Expanded Bake Structural Adhesive:

PPG's body shop one component epoxy structural adhesive with reduced minimum bake window (140°C) technology innovations compared to typical structural adhesives (E.g. *Betaguard® CI 1415 HV*) enabling OEMs to achieve significant energy and cost savings while addressing a wide range of vehicle design needs, including EV vehicle trends:

- Long shelf Stability
- Wet Adhesion to oily surfaces
- 140°C bake and overbake capabilities
- Applied with standard cold or warm pumping equipment
- Excellent stiffness, shear strength and impact resistance
- Wash out resistance
- Mixed material bonding capable (CRS, Aluminum, HDG, EZG)
- Reduced spot welds

#### Suggested Market

Body Shop

#### Suggested End Uses

Body Rocker Panels

Full Car Body Structures

Vibration reduction

Battery pack shell and module enclosures

Mixed metal applications

Center tunnel, floor panel and side wall

✓ Approved by Major OEMs

### The PPG Benefit



Expanded bake window to as low as 140°C with overbake protection



>6 months storage stability without negative impact to viscosity



Proven effective stack w/ Expanded Bake electrocoat PPG Enviro-Prime® Epic 300



High peel strength maximizes load per meter of adhesive



Exceptional cohesive failure ensures bonds remain under stress



High impact resistance provides critical crash protection properties



# Corabond® Expanded Bake Structural Adhesive



**Introducing PPG's CORABOND® Expanded Bake Structural Adhesive (continued):** This new innovation in adhesive technology provides the performance you need to meet your design requirements with added operating benefits to minimize the bake time and energy.

*Corabond* expanded bake structural adhesive can potentially help OEMs to reduce CO<sub>2</sub>, vehicle weight, and energy intensity, while providing the same sustainable end use benefits of vehicle longevity, fuel economy and energy efficiency due to the adhesive bonds being both flexible and rigid at the same time.

All of the performance you have come to expect from PPG's high performance adhesives now cures at a lower bake temperature

## Product Characteristics

Color	-	Red/Purple
Thickness	-	10 mls (w/ spacer beads)
Viscosity	Severs, 5MM nozzle, 3 Bar	1M cPs
Substrates	-	HDG, Aluminum, EZG
Bake Requirement Standard	Std. EC Oven Conditions	140-195°C
<b>Bake Minimum</b>	<b>Std. EC Oven Conditions</b>	<b>140°C for 15 minutes</b>
Bake Maximum	Std. EC Oven Conditions	195°C for 45 minutes

## Performance Properties

T-Peel Strength	D 41 1108, v=10mm/min	≥ 8 N/mm
Impact Resistance	ISO 11343, v=2m/s	≥ 25 N/mm
Shear Strength	D 42 5424, 10Hz	≥ 25 MPa
Storage Stability	-	3-6 mos. @ ambient/ 40°C

## Compatible Products

<b>Pretreatment:</b>	Versabond
<b>Electrocoat:</b>	Epic 300



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## Product Specs

### CORABOND® Expanded Bake

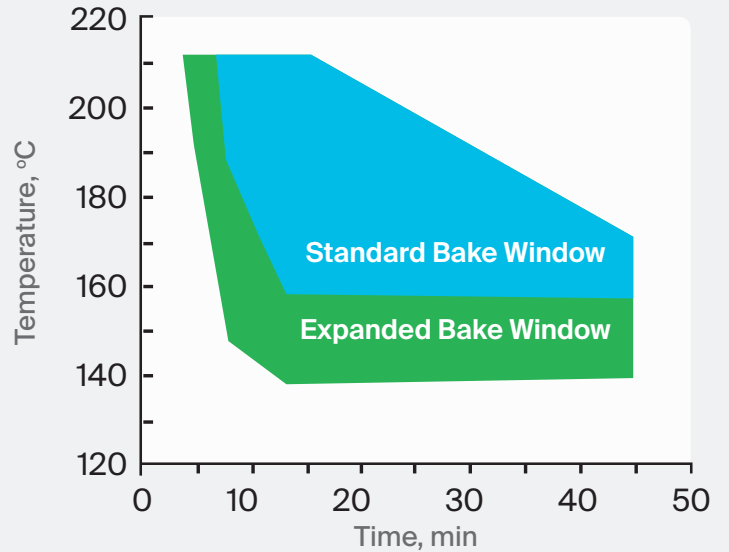
- 1K epoxy, colors available
- Broad cure temperature range (140°C - 195°C 10 min) that also meets the current storage stability requirements

### Performance

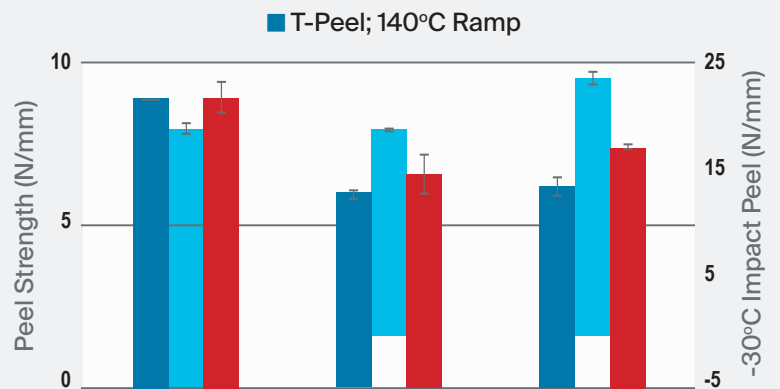
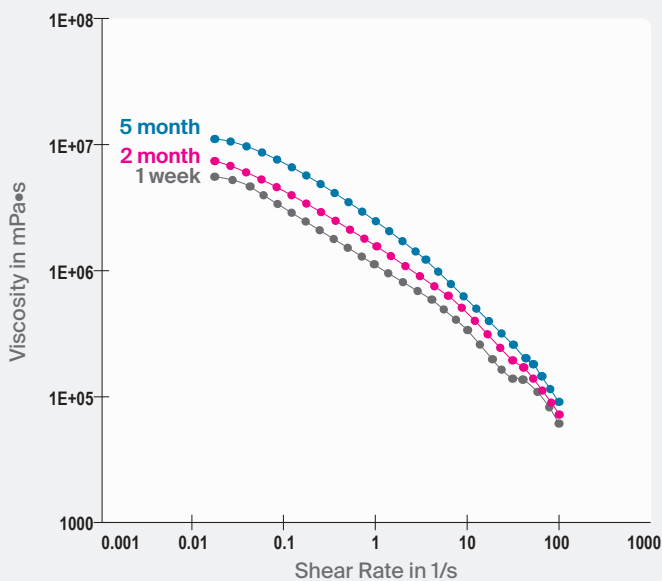
- Impact Resistance:  $\geq 25$  N/mm
- Peel Strength:  $\geq 8$  N/mm
- Shear Strength:  $\geq 25$  MPa
- 3-6 month storage stability @ ambient / 40°C

### Recommended for

- Thick metal sections, including rocker to protect battery from crash events
- Reduced electrocoat oven temperatures



Room temperature storage stability >6 months and robust performance on a variety of substrates





We protect and  
beautify the world™



For more information visit:  
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