POWERCRON® 8000HE Black

POWERCRON 8000HE FEATURES

POWERCRON 8000HE is PPG's high edge eighth generation cationic epoxy technology. Its advantages include:

- State-of-the-art corrosion resistance particularly on sharp edges.
- Lead-free formulation.
  - Improved corrosion resistance
  - Lead-free film
  - Lead-free effluent
- Cure capability as low as 300°F depending on requirements.
- Lower applied cost.
  - Reduced film shrinkage
  - Reduced cure temperature
  - Reduced oven maintenance
- Reduced emissions.
  - Low solvent content
  - VOC less than 0.1 lbs/gal.
  - HAPs-free
  - Reduced cure by-products

Revised: 2/10/2005

PRODUCT DESCRIPTION

POWERCRON 8000HE is PPG's eighth generation cathodic epoxy electrocoat technology modified for maximum edge coverage. This product demonstrates several improvements over previous generations including excellent corrosion resistance without the use of heavy metals, improved transfer efficiency, reduced cure temperature, and reduced volatile emissions.

POWERCRON 8000HE was developed to provide superior corrosion resistance without the use of heavy metals in the formulation, particularly lead. The resulting product is free of heavy metals in the coating film and also any effluent that is discharged from the system.

POWERCRON 8000HE exhibits one of the highest transfer efficiencies available in a high performance cationic epoxy electrocoat. This was achieved through a reduction in the amount of cure by-products from the coating, or weight loss, during the curing process. Applied cost savings of 5–10%, or more, are realized in addition to a reduction in oven emissions.

POWERCRON 8000HE is formulated to cure at 25-50°F lower oven temperature than previous products resulting in energy and productivity savings.

POWERCRON 8000HE is formulated with a low organic solvent content, resulting in a Volatile Organic Compound (VOC) content of less than 0.1 pounds per gallon. In addition, this product is formulated with HAPs-(Hazardous Air Pollutants) free solvents.

COMMERCIAL USES

Cationic epoxy electrocoats are the benchmark for corrosion resistance and are utilized where high performance requirements are demanded. Listed below are a number of industries using these products:

- Automotive Parts & Accessories
- Compressors
- Computer Parts
- Fasteners
- Generators
- Heavy Duty Trucks
- Marine Engines
- Metal Furniture
- Switchgear
- Transformers

14 tanks are currently utilizing POWERCRON 8000HE technology.

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APPLICATION DATA

Bake: Standard bake is 20 minutes at 325°F (163°C) metal temperature. Higher temperatures may be required for specific properties.

Weight Loss: 9% (20 minutes @ 325°F metal temperature)

VOC: < 0.1 lbs per gallon minus water (as supplied)

HAPs: None

Heavy Metals: None

FILM PROPERTIES

Property	Test Method	Performance
Color	---	Black
Film Thickness	---	0.4 - 1.2 Mils
Gloss - 60 Degree	ASTM D523-89	50 – 80
Pencil Hardness	ASTM D3363-05	2H Minimum
Cross-Hatch Adhesion	ASTM D3359-02	4B - 5B
Salt Spray	ASTM B117-05	1000 Hours Minimum
Humidity	ASTM D1735-04	1000 Hours Minimum
Water Immersion	ASTM D870-02	240 Hours Minimum
Gravelometer	GM 9508P	6 Minimum
Rust Spot	GM 9632P	Zero (Avg)
Throwpower	GM 9535P	12 - 15 Inches

Cold Rolled Steel Lab Panels, Zinc Phosphate Pretreatment
0.8 Mil Average Film Thickness, Cure 20 Minutes @ 325°F

CORROSION RESISTANCE

Substrate / Pretreatment	Salt Spray* 1000 Hours	40 Cycle** Corrosion
CRS/Zinc Phos/Chrome	< 1 mm	2 - 3 mm
CRS/Zinc Phos/Non-Chrome	< 1 mm	2 – 3 mm
CRS/Zinc Phos/DI Water	1 - 2 mm	2 – 3 mm
CRS/Iron Phos/Chrome	2 – 4 mm	3 – 5 mm
CRS/Iron Phos/Non-Chrome	2 – 4 mm	3 – 5 mm
CRS/Iron Phos/DI Water	2 – 15 mm	10 – 20 mm
CRS/Untreated	5 – 15 mm	9 – 11 mm
Galvanized/Zinc Phos/Chrome	-----	0 – 2 mm

Cure 10 Minutes @ 325°F, Cold Rolled Steel Lab Panels
(Average Total Scribe Creep)
*** Salt Spray - ASTM B117-03**
**** 40 Cyclic Corrosion - GM9540**

Catalog

1) Create a pdf file of catalog.
2) Add it to drop down list