

PRODUCT DATA SHEET

STOVE BRIGHT® HIGH TEMP POWDER COATING 1PC-630-SERIES



DESCRIPTION:

This high-temperature silicone system is formulated using a proprietary blend of resins and pigments to provide service up to 800°F (427°C). This product is designed to be a smooth or textured coating for steel and aluminum substrates.

Product Benefits

- Enhanced charging and handling characteristics
- Provides excellent flow and leveling over a wide range of film thickness
- Good long-term performance at 800°F (427°C) while maintaining color, gloss and film integrity.
- Excellent UV resistance for outdoor use on aluminum or aluminized substrates.
- Designed to be more compatible and to reduce cross contamination with other coatings*

SPECIFICATIONS:

Cure cycle ¹ Minimum substrate temperature and dwell	20 minutes at 400°F (204°C)
	12 minutes at 425°F(218°C)
	8 minutes at 450°F (232°C)
Specific Gravity	1.95 +/-0.05
Theoretical coverage 1 mil	99 ft ² per pound
Film builds between	0.80 and 2.80 mils
Recommended film	2.00 mils
Heavier film builds are not recommended.	

¹ If high-temperature silicone coatings are not fully cured before being placed in-service, the coating may demonstrate failure as chipping, loss of adhesion, or corrosion.

TYPICAL PROPERTIES:

Adhesion (ASTM D3359)	4B-5B
Gloss at 60° (ASTM D523)	50-60
Impact Resistance (ASTM D2794-90)	80D/20R
Pencil Hardness (ASTM D3363)	>2H

HEAT RESISTANCE TEST:

Continuous testing for 48 hours at 800°F (427°C) shows these products hold gloss, color and physical integrity at this service temperature. Testing meets specific performance requirements for several barbecue manufacturers.

APPLICATION:

Room temperature 77°F (25°C) electrostatic application is recommended. Reduced voltages (45 – 60kV) can improve coating film thickness uniformity.

SURFACE PREPARATION:

High temperature coatings require cleaner substrates to maintain a good bond between metal and coating. Abrasive media blast is an excellent method of surface preparation. Chemical pretreatments are effective, but must be rinsed to leave a clean surface with no dirt or cleaner residue. *Phosphate pretreatments have their own temperature limits that must be observed.* Contact your chemical pretreatment supplier. Also substrates have limits that must be observed.

FINISHED PRODUCT HANDLING:

The finished coated product is not as tough as standard powder coatings. Care must be exercised in handling and packing to ensure that finish is not damaged.

PRECAUTIONS:

Read and understand the MSDS before using.

This product is more temperature sensitive than normal powders and should be used at temperatures below 77°F (25°C). This product is more susceptible to moisture than other powder products. Because of the electrostatic properties of this powder a fluidizing feed hopper with higher air flow must be used.

**We recommend testing for compatibility with other products that you use before purchasing.*

STORAGE:

This product should be stored at temperatures below 77°F (25°C) for up to 6 months. Under carefully controlled conditions, shelf life may be extended.

LIMITATIONS

The technical data and suggestions for use in this product data sheet are currently correct to the best of our knowledge, but are subject to change without notice. Because application and conditions vary, and are beyond our control, we are not responsible for results obtained in using this product, even when used as suggested. The user should conduct tests to determine the suitability of the product for the intended use. Our liability (including liability for breach of warranty, strict liability in tort, negligence or otherwise) is limited exclusively to replacement of the product or refund of its price. Under no circumstance are we liable for incidental and consequential damages.