



# STOVEBRIGHT POWDER COATING

## 1PC-654-SERIES

### HIGH-TEMP POWDER

### PRODUCT DATA SHEET

#### GENERAL INFORMATION:

This silicone powder coating is designed for use in high temperature applications. It contains a blend of resins and pigments to provide coating performance to peak temperatures of 1200°F (650°C).

It is designed to be a smooth or textured coating for steel and aluminum substrates. The 654 series can be formulated from flat to semi-gloss (35-45 @ 60° reflect) DARK/EARTH TONE COLORS ONLY FOR 654

#### Benefits

- Enhanced charging and handling characteristics
- Thinner film builds
- Provides excellent flow and leveling over a wide range of film thickness
- Great performance at 1000°F (538°C)
- Excellent UV resistance for outdoor use
- Designed to be more compatible and to reduce cross contamination with other coatings\*

#### SPECIFICATIONS:

Cure cycle <sup>1</sup> Minimum substrate temperature and dwell	15 minutes at 400°F (204°C)
	9 minutes at 425°F(218°C)
	6 minutes at 450°F (232°C)
Specific Gravity	1.6 – 2.0 +/- .05
Theoretical coverage 1 mil	96 - 121 sq ft per pound
Film builds between	0.80 and 3.20 mils
Recommended film	2.00 mils
<b>Heavier film builds are not recommended as this may result in blistering or under-cure.</b>	

<sup>1</sup> 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.

#### HEAT RESISTANCE TESTING:

Continuous testing at 600°F (315°C) and 800°F (427°C) indicates this product hold gloss, color and physical integrity at this service temperature. Testing at 1000°F (538°C) indicates good performance up to 24 hours with some gloss change at extended times and higher temperatures. Testing indicates good film integrity after exposure to temperature at 1200°F (650°C).

*\*Performance varies w/ color and gloss and should be evaluated for each application.*

#### 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 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.

#### APPLICATION:

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

#### STORAGE:

This product is more temperature sensitive than normal powders and should be stored and used at temperatures below 77°F (25°C). Storing powder at 68°F (20°C) will extend the shelf life. This product is more susceptible to moisture contamination than other powder products.

#### PRECAUTIONS:

##### Read Material Safety Data Sheet before using.

Because of the electrostatic properties of this powder a box gun is not recommended.

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

#### 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.