PRISMATIC POWDERS

# TECHNICAL DATA INFORMATION

**As with all powder coatings, this product may vary between lot numbers, KV settings, mil thickness, oven temperatures, application equipment and technique. We recommend a clear topcoat to maintain the appearance and prevent oxidation on metallic powder coatings.**

**Always coat a sample before any production to determine if this product meets all your requirements.**

## Item Code / Color Name:

**PMB-8039 Crushed Starlight Step 1**

## Suggested Cure Time and Temperature:

**The cure time starts when the substrate reaches temperature. Always check temperature of thickest part of the substrate.**

2 Minutes at 400°F (204°C)

## Special Instructions / Notes:

**Each additional coat of powder coating will act as an insulator, which will require extra time for the substrate to reach temperature. Extend cure times as needed.**

To achieve proper two-step color results, Step 2 must be applied as the topcoat.

Inconsistent mil thickness in either the basecoat or topcoat can result in uneven color. Apply both the basecoat and topcoat in accordance with the recommended mil thickness specifications.

Flash, or partially cure, basecoat for 2 minutes after the powder has flowed to a gloss state, with both oven and part metal temperatures at 400°F. An applicator must visually confirm that the powder has reached the gloss state. Using an infrared thermometer, verify that the substrate has reached the target temperature.

Flash time should begin only after the part metal reaches the target temperature, as starting too early can negatively affect powder flow, crosslinking, gloss, color, and adhesion. Actual times may vary depending on conditions.

Allow the part to cool completely before applying the topcoat. Once the topcoat has been applied, fully cure it according to the topcoat's recommended cure schedule.
We strongly recommend spraying a test panel before starting your project, especially if you are using a topcoat or additional basecoats, primers, etc. This helps ensure the final color meets your specifications and allows you to anticipate any potential changes in color or finish.

## Powder Properties:

Thermosetting Powder Coating
Powder Type: Polyester (Contains TGIC)
Gloss: High Gloss: 85+ Gloss Units +/-5
Recommended Use: Exterior / Interior
Adhesion/Crosshatch: 4B
Mandrel Bend: 96% Resistance
Indirect Impact: 80 Inch-pounds
Direct Impact: 80 Inch-pounds
Pencil Hardness: 2H
Specific Gravity: 1.49+/-0.05
Finish Type: Metallic
Storage: Store in a cool, dry environment 70° F (21° C)
Shelf Life: 6-8 Months

PRISMATIC POWDERS

TECHNICAL DATA INFORMATION

## Application:

Pre-treatment and proper prep to substrate before powder coating are critical factors in developing maximum corrosion resistance and maximizing the product's lifetime. Electrostatic spray to a cold substrate. Please see application guide for additional information.

**Recommended Mil Thickness: 2.5-3.5 Mils**

## Equipment Information:

Gun System: Nordson Encore LT
Fluidized Hopper Recommended
Not Recommended for Tribo Application
Suggested Nozzle: Conical Tip with Diffuser
Alternative tips can be used but may cause color variation.

## Testing parameters are as follows:

- **Gloss Units and levels** are measured at a 60° angle
- **Adhesion** is measured on a scale of 0B, 1B, 2B, 3B, 4B, 5B, with 5B being the highest achievable rating.
- **Flexibility or Conical Mandrel Bend:** "100% Resistance" is the highest achievable rating and indicates that the coating did not crack or spall.
- **Impact Performance Direct/ Indirect:** is measured on a scale of 0 inch-pounds to 160 inch-pounds, with 160
- inch-pounds being the highest achievable rating.
- **Type of Substrate:** Mild Steel Q panel/ Aluminum Q panel (Blasted/ Unblasted)

Not all powder coating is recommended for exterior use; it is the buyer's responsibility to ensure they purchase a product best-suited for the intended application. Certain pigment types, such as those found in the Illusion Series and Transparent powders, do not have the same level of UV resistance as those found in Solid Tone finish types.

Exterior topcoats applied to interior finishes may improve UV resistance and durability of the product but DOES NOT ensure a long-lasting exterior finish. Please conduct your own testing to ensure the products you choose meet your requirements.

NIC Industries, Inc. does not warranty the use or application of its manufactured materials or supplies. Our only obligation shall be to replace any defective materials supplied by us after determining them to be faulty. NIC Industries, Inc. assumes no liability for damages of any kind, and the user accepts the product "as is" and without any warranties, expressed or implied. The suitability of the product or intended use shall be the user's sole responsibility.

We believe the information in this bulletin is correct to the best of our knowledge and testing. The recommendations and suggestions herein are made without guarantee or representation of results. We recommend that you make adequate tests in your laboratory or plant to determine if this product meets all your requirements.