

#### **Product Information**

DuPont™ PFA powder 532G-13054 is a filled version of PFA powder coating, specifically formulated to reduce permeation. This product should be considered whenever permeation is thought to be a considerable risk to the performance of normal fluoropolymer coatings. This filled coating can be applied over a broad range of thicknesses. However, a coating thickness of 200–500 µm (8–20 mil) is recommended.

## **Property Data**

Product Code	532G-13054
Properties <sup>1</sup>	
Color	Ruby Red
Coverage, <sup>2</sup> ft <sup>2</sup> /lb, (m <sup>2</sup> /kg)	87.8 (18.4)
Average Particle Size, µm	61 – 101
Bulk Density, g/100cc	75 – 109
Maximum In-Use Temperature <sup>3</sup> , °C (°F)	260 (500)
Food Contact⁴	No

<sup>&</sup>lt;sup>1</sup> Physical constants are averages only and are not to be used as product specifications. They may vary up to 5% of the values shown



<sup>&</sup>lt;sup>2</sup> Theoretical coverage at dry film thickness (DFT) of 1.0 mils (25μ) based on 100% application efficiency. It does not take normal production losses into account

<sup>&</sup>lt;sup>3</sup> When applied and cured as a full system (i.e. primer, midcoat and/or topcoat)

<sup>&</sup>lt;sup>4</sup> See Food Contact section

# **Application Method**

Substrate	Aluminum, stainless steel, and carbon steel are acceptable substrates with the use of the proper primer.
Surface Preparation	Best adhesion is obtained by thoroughly cleaning and then roughening the substrate. The grit blast profile should be to an Ra of 2.5–3 μm (100–125 μin) maximum.
Screen	Through a 60 mesh (approx. 250μ) screen
Primer	420G-703. Filter the primer through 40-mesh (approximately 400 $\mu m$ [16 mil]) stainless teel or nylon.
Product DFT*	Coating thickness of 200–500 µm (8–20 mil)
Electrostatic Voltage	For the first coat, apply powder onto the wet primer and cold substrate using a spray voltage of 15–30 kV. The part must be well grounded. The gun settings depend on the gun type and the complexity of the part. The given settings are typical for a common electrostatic gun.
Drying	Primer can be dried for 10 min. at 149 °C (300 °F). The powder coating can be applied directly over wet primer when possible.
Curing	Bake 1st coat for 10–20 min at 232–260 °C (450–500 °F) as measured by a thermocouple on the substrate being coated. Then bake for 10–20 min. at 385–393 °C (725–740 °F)
Multiple Coats	Apply powder to either a cold part or hot flock. The bake for the second and subsequent coats should be lowered to 360–377 °C (680–710 °F) metal temperature for 20 min. The last coat can be baked for 2–4 hr with metal temperature of 340–365 °C (645–660 °F) for optimum flow out.

<sup>\*</sup> DFT = dry film thickness. Measured with Dual probe ED10 used in combination with the Dualscope MP20 and MP40 E-S All recommendations are based upon best knowledge

# **Handling and Storage**

Powders must be stored at normal room temperature 18–27  $^{\circ}$ C (65–80  $^{\circ}$ F)

- Seal package to avoid excessive humidity or contamination.
- Powders should be usable for an indefinite period of time without caking or deteriorating if properly stored.

For any medical application or development, please consult DuPont first.

For detailed information on health and safety, refer to the Material Safety Data Sheet and the latest edition of "The Guide to the Safe Handling of Fluoropolymer Resins," published by The Society of the Plastics Industry, Inc. (www.fluoropolymers.org) or by PlasticsEurope (www.plasticseurope.org).

#### **Food Contact**

This coating **does not** comply with US FDA food contact regulations and **can not** be sold and/or used for food contact applications for non stick coatings in Europe.

## **Disposal and Other Considerations**

Please follow these disposal guidelines as outlined in "The Guide to the Safe Handling of Fluoropolymer Resins," (available at www.fluoropolymers.org for download):

- All treatment, storage, transportation, and disposal of this product and/or container must be in accordance with applicable national and local regulations.
- Do not discharge aqueous dispersions to lakes, streams or waterways.
- Separate solids from liquid by precipitation and decanting or filtering. Dispose of dry solids in a landfill that is permitted, licensed or registered to manage industrial solid waste. Discharge liquid filtrate to a wastewater treatment system.

- Incinerate only if incinerator operates at 800 °C or higher and is capable of scrubbing out hydrogen fluoride and other acidic combustion products.
- Industrial fluoropolymer waste containing additives such as solvents, primers or thinners must be regarded as special waste. Companies should contact their local waste disposal authorities for details of the relevant waste disposal regulations.
- Empty containers should preferably be cleaned and recycled.
  If this is not possible, the containers should be punctured or otherwise destroyed before disposal.

For more information on DuPont Industrial Nonstick Coatings, please visit www.teflon.com/industrialglobalsupport

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