



# Teflon™ Reinforced PFA Powders

## Industrial Coatings

532G-13032, 532G-13051, 532G-13054

## Fact Sheet

PFA reinforced powders are formulated to optimize specific in-use properties. 532G-13051 & 532G-13054 (known as Ruby-Red) offer exceptional permeation resistance when applied over a broad range of thicknesses. A DFT\* of 200–500 µm (8–20 mil) is often recommended. 532G-13032 is specifically formulated to enhance resistance against scratches and abrasion.

### Property Data <sup>1</sup>

Product Code	532G-13032	532G-13051	532G-13054
Color	Light Grey	Ruby Red	Ruby Red
Closest RAL		3033	3033
Coverage, <sup>2</sup> m <sup>2</sup> /kg	18.0		18.0
Particle size, <sup>3</sup> Average, µm	31 - 50	24 - 32	50 - 110
Bulk Density, g/100 cc	59 - 90	60 - 118	66 - 118
Density, kg/l	2.23	2.15	2.20
VOC content, Europe, <sup>4</sup> g/kg	0	0	0
Maximum In-Use Temperature, °C (°F)	260 (500) continuous use & 290 (550) intermittent		
Dust explosivity, g/l	Negative between 0.154 – 1.54 g/l		no dust explosion risk

<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>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>3</sup> Particle size refers to the average particle size measured by laser diffraction.

<sup>4</sup> Weight % Volatiles based on volatiles with vapor pressure >= 0.1 hPa

### Application Method

General	Primer 420G-7xx (do not use 420G-42x because of adhesion failure with PFA). Apply powder in dry conditioned spray booth, avoid contact with moisture
Screen	Through a 60 mesh (approx. 250 µm) screen
Powder supply Settings	Use fluidized bed with or without vibration system. Depends on powder quantity and particle size of the powder. Flat jet nozzle recommended. On flat and/or conductive parts high voltage and higher amperage can be used; Voltage: 20-80 kV Amperage: higher than 10 µA if needed. On insulated and complex parts amperage should be lowered typical indication: 6-10 µA. The gun settings depend on the gun type and the complexity of the part. The given settings are indicative for Gema Optiflex (Optistar) electrostatic gun: <ul style="list-style-type: none"> <li>• Product supply: 30%-50%</li> <li>• Air carrier: 3.0 Nm<sup>3</sup>/h</li> <li>• Fluidization bed: 0.3 Nm<sup>3</sup>/h</li> <li>• Electrode fluidization: flat jet 0.2 Nm<sup>3</sup>/h</li> <li>• Amperage: 10 µA</li> <li>• Voltage: 60 KV</li> </ul>
Recommended DFT*	532G-13032 : 20–50 µm per coat. No need to apply clear top-coat as final layer. 532G-13054 : First coat limited to 70-80µm, then up to 150µm per coat. Total thickness up to 1000µm.
Drying	Powders can be applied dry on wet primer. Then solvents should be flashed off 5-10 min. at 150-170°C
Curing (metal temp.)	30 min. at 380°C. It is important to keep the difference between metal and oven temperature small to prevent bubbling.
Multiple coats	532G-13054 : The powder can be hot flocked, cure temperature reduced to 340°C. Final cure should be done at 330°C. Bake temperature can be reduced down to 330°C to avoid bubbling. Apply clear PFA top-coat (powder or liquid) as final layer.
Repair	532G-13054 : It is possible to sandpaper the coating. Use P80-120 (high DFT) or P400 (low DFT). Be careful not to damage the primer. Repair with a paste obtained by spraying 858G-917 on a panel.

\* Dry Film Thickness (DFT) measured with Dual probe ED10 or FD10 used in combination with the Dualscope MP20 or MP40 E-S

All recommendations are based upon best knowledge

### Handling and Storage

- Powders must be stored at normal room temperature 18-27 °C (65-80 °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 medical application and development, consult Chemours.

### Food Contact

This product, when used in combination with another layer compliant with food legislations, is designed to be used in direct contact with food. Applied according to the application method and instructions on this fact sheet, the fully cured system will comply with US FDA food contact regulations. It can be sold and/or used for food contact applications for non stick coatings in Europe following the national legislations of each European country, having specific regulations for this category of coatings (non-stick, high temperature resistant). Presuming appropriate processing by the coater/appliator following the Good Manufacturing Practices Regulation (EC) n° 2023/2006/EC, the products can be used in the countries of the European Community for the manufacturing of non-stick coatings according to article 3 of Regulation (EC) No 1935/2004. Any changes or variations of individual coating thickness from what is indicated in this fact sheet should be assessed for food contact applications prior to its use. For details and information please contact your Chemours representative.

In Europe, in the case of incomplete compliance in one country, the product can, on the basis of its full compliance in at least one Member State of the European Union, be used for direct

food contact in all Member States according to the Article 34-36 of the Treaty on the Functioning of the European Union (TFEU).

Compositional statements, referring to relevant national legislation, are available on request.

### Disposal and Other Considerations

Please follow the guidelines as outlined by [SPI](#) (The Society of the Plastics Industry) or [APME](#) (Association of Plastics Manufacturers Europe). For detailed information on health and safety, refer to the Safety Data Sheet.

For disposal, please follow these guidelines:

- 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 Chemours Nonstick coatings: [www.chemours.com](http://www.chemours.com) or [www.teflon.com](http://www.teflon.com)**

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