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 [1]

Product Code	532G-13032	532G-13051	532G-13054
Colour	Light Grey	Ruby Red	Ruby Red
Closest RAL		3033	3033
Coverage,[2] m^2/kg (ft^2/lb)	17.81 (87.0)	18.17 (88.7)	18.17 (88.7)
Particle size,[3] Average, µm	31 - 50	24 - 32	50 - 110
Bulk Density, g/100 cc	59 - 90	60 - 118	66 - 118
Density, kg/l (lbs/gal)	2.23 (18.61)	2.20 (18.36)	2.20 (18.36)
VOC content, Europe,[5] g/kg	X.X		
Maximum In-Use Temperature, °C (°F)	260 (500) continuous use & 290 (555) intermittent use		
Dust explosivity, g/l	Negative between 0.154 – 1.54 g/l no dust explosion risk		

[1]Physical constants are averages only and are not to be used as product specifications. They may vary up to ±5% of the values shown

[2]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

[3]Particle size refers to the average particle size measured by laser diffraction.

[4]Weight % volatiles based on volatiles with vapor pressure ≥ 0.1 hPa. US VOC (ap) and VOC (le) are listed on the US Safety data sheet, available upon request

Application Method

Coating Preparation	Homogenize powder before opening bag.
Screen	60 mesh (approx. 250 µm) stainless steel or nylon. Insufficient screening can result in application defects.
Application	Use fluidized bed with or without vibration system (depends on powder quantity and particle size of the powder). On flat and/or conductive parts high voltage and higher amperage can be used. On insulated and complex parts amperage should be lowered. In some situations a fixed voltage may be more effective than using an automatic current control setting. The gun settings depend on the gun type and complexity of the part. Recommended general settings: • Product supply: 30%-50% • Air carrier: 3.0 Nm³/h • Fluidization bed: 0.3 Nm³/h • Electrode fluidization: flat jet 0.2 Nm³/h • Amperage: 10 µA • Voltage: 60 KV
Recommended DFT*	532G-13032: 20–50 µm (0.8-2.0 mil) per coat. No need to apply clear top-coat as final layer. 532G-13051 / 13054: First coat limited to 70-80 µm (2.8-3.1 mil), then up to 150 µm (5.9 mil) per coat. Total thickness up to 1000 µm (40 mil). Apply clear PFA top-coat (powder or liquid) as final layer.
Recommended Primer	420G-7xx, 470G-7xx (EMEA only), 459G-6xx, 532G-42331
Drying (metal temp.)	Powders can be applied dry on wet. Full coating system should be dried before final cure.
Curing (metal temp.)	20-30 minutes at 380-390°C (715-735°F). Keep the difference between metal and oven temperature small to prevent bubbling. Bake temperature of the first coat is important for adhesion to the primer.
Multiple coats	The powder can be hot flocked, cure temperature reduced to 330-360°C (625-680°F) to avoid bubbling. Additional long bake of 90-180 minutes at 330-345°C (625-655°F) will improve coating properties such as inter-coat adhesion, smoothness, permeation resistance and abrasion resistance
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, MP40, FMP20 or FMP40

All recommendations are based upon best knowledge

Chemours™

Handling and Storage

- Powders should be stored in closed plastic bags.
- Powders may form lumps under prolonged storage; sieving through a coarse screen will restore the powder
- Powders should be usable for an indefinite period of time without caking or deteriorating if stored at optimal storage conditions: 18°C-27°C (65°F-80°F). Maximum storage temperature 40°C (105°F).
- Transport conditions: 5°C-40°C (40°F-105°F). For safe storage conditions, pls. refer to safety data sheet.

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.

In the European Union this product complies with:

• Regulation (EC) n° 1935/2004 on materials and articles intended to come into contact with food and is safe to be used and/or sold in accordance with article 3 of this Regulation; and

• Specific national legislations/ recommendations applicable to this category of coatings (non-stick, high temperature resistant) listed in the detailed compliance documentation for food contact applications.

In case this product is not compliant with the specific legal requirements in one EU Member State; This product, in accordance with Article 34-36 of the Treaty on the Functioning of the European Union (TFEU), can still be used and/or sold for food contact applications in all EU Member States, on the basis of its full compliance in at least one Member State of the European Union.

The above is only valid on condition that the product is applied: according to the information outlined in the application method section of this fact sheet, on substrates that are suitable for use in food contact applications, and for EU presuming appropriate processing by the coater/applicator following the Good Manufacturing Practices Regulation (EC) n°2023/2006 /EC.

Any changes or variations from application method indicated in this fact sheet for food contact applications shall be assessed prior to its use.

For detailed regulatory compliance information and/or any potential regulatory restrictions on the use of this (primer, midcoat, topcoat) product within one of the corresponding Industrial Finishes coating systems from Chemours, we refer you to the US FDA and/or EU compliance documentation from Chemours for the specific coating system utilizing this product, as well as the technical advice included in this product factsheet.

For details and information please contact your Chemours representative.

Disposal and Other Considerations

Please follow the guidelines as outlined by SPI (The Society of the Plastics Industry) or PlasticsEurope (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 or www.teflon.com

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