



# Teflon™ Water Based PFA Topcoats

## Industrial Coatings

### 858G-917

## Fact Sheet

Liquid PFA reinforced mid-coat (known as Ruby-Red) formulated to offer exceptional permeation resistance when applied over a broad range of thicknesses. To confirm suitability of this material in a severe chemical environment, do contact your Chemours representative. Systems with 858G-917 must be applied with a clear topcoat liquid or powder.

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

Product Code	858G-917
Color	Ruby-Red
Closest RAL	4002
Coverage, <sup>2</sup> m <sup>2</sup> /kg (m <sup>2</sup> /L) (ft <sup>2</sup> /gal)	9.95 (14.55) (593)
Viscosity, <sup>3</sup> centipoises	6500 – 8500
Volume Solids, %	35.9 – 36.9
Weight Solids, <sup>4</sup> %	53.4 – 57.4
Density, kg/l (lbs/gal)	1.462 (12.20)
VOC content, Europe, <sup>5</sup> g/kg	26.2
Maximum In-Use Temperature, °C (°F)	260 (500)
Flash Point, SETA closed cup, °C (°F)	None

<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>Brookfield RVT (Measured with spindle 2 at 20 RPM/25°C)

<sup>4</sup>Weight Solids (Measured 30'x105°C+15'x380°C)

<sup>5</sup>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	Mix 15 minutes or more until contents are homogeneous. Set the mixer speed so that a strong vortex appears while avoiding air entrapment. We recommend the use of an axial flow impeller. Insufficient mixing can result in application defects.
Filtering	15 mesh (approx. 800 µm) stainless steel or nylon. The product is difficult to filter (high viscosity)
Application	RP (Reduced Pressure), conventional or HVLP gun. Nozzle: 1.2-1.8 mm. Atomizing air pressure: 1.5-3.0 bar (20-45 psi). Dilute if desired. The settings highly depend on the gun type & coating viscosity.
Recommended DFT*	Up to 250 µm (10 mils) per coat. We recommend limiting the first layer to 80-100 µm (3-4 mils). Do apply at least 2 layers (even thin) to lower the risk of having a pinhole. Total DFT up to 1500 µm (60 mils).
Recommended Primer	420G-7xx, 470G-7xx (EMEA only), 459G-6xx. Do not use 420G-42x. Take good care that the primer covers the substrate before application of the 1st coat
Drying (metal temp.)	20-30 min. at 120–150°C (250-300°F). Oven temperature 150°C (300°F) max.
Curing (metal temp.)	20 minutes at 370-380°C (700-715°F) at least for the first coat. Next layers shall be cured 20 minutes at 330-340°C (625-640°F). Keep a low delta between air and metal temperature to avoid additional stress on the coating. If the coating is too rough or needs to be repaired, it is possible to sandpaper the coating. For high thickness, use P80-120, for thin layers, use P400 (be careful not to damage the primer). Application of clear top-coat as final layer shall be cured 20 minutes at 330-340°C (625-640°F).
Additional long bake	1-4 hours at 330-340°C (625-640°F), oven temperature not to exceed 350°C (660°F). A coating of 500 µm, which is properly applied and baked, should pass 4-5 kV porosity test.
Clean up	Water
Thinner / Additive	Deionised water

\* 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



## Handling and Storage

- Gently mix (15 min at 30RPM) before use
- Shelf life is 18 months 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.
- Waterbased product, protect from freezing

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](http://www.chemours.com) or [www.teflon.com](http://www.teflon.com)**

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CAUTION: Do not use Chemours materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from Chemours under a written contract that is consistent with Chemours policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your Chemours representative. You may also request a copy of the Chemours POLICY Regarding Medical Applications