



Teflon™ Water-Based Primer

Industrial Coatings

857G-040

Fact Sheet

Teflon™ industrial coatings are aqueous dispersions that are uniquely blended multi-coat systems of Teflon™ PTFE (polytetrafluoroethylene), Teflon™ FEP (fluorinated ethylene propylene), and Teflon™ PFA (perfluoroalkoxy) to optimize performance. The exceptional properties provide superior abrasion resistance and extend service life.

Property Data

Properties ^a	857G-040
Color	Black
Coverage, m ² /kg (m ² /L) (ft ² /gal) ^b	4.67 (5.56) (226)
Coverage at DFT, m ² /kg (ft ² /gal) ^c	14.60 (708) (at 8 µm)
Viscosity, cP ^d	200–350
Volume Solids, %	13.4–14.4
Weight Solids, % ^e	27.7–29.7
Density, kg/L (lb/gal)	1.19 (9.92)
Maximum In-Use Temperature, °C (°F)	260 (500)
Flash Point, SETA Closed Cup, °C (°F)	None

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

^bTheoretical coverage at Dry Film Thickness (DFT) of 25 µm (1.0 mil) based on 100% application efficiency. It does not take normal production losses into account.

^cTheoretical coverage at Dry Film Thickness (DFT) and based on 100% application efficiency. It does not take normal production losses into account.

^dBrookfield RVT (Measured with spindle 2 at 20 rpm/25 °C [77 °F])

^eWeight Solids (Measured 30 min x 105 °C [221 °F] + 15 min x 380 °C [716 °F])

Application Method

Substrate	Rolled and cast aluminum, stainless steel. Elements of impurity can have a reverse impact on quality of the coated article. Pretreatments, which withstand the curing temperature, are suitable. The part to be coated shall be of design and degree of workmanship, such as to produce excellent quality merchandise based on accepted industry standards.
Surface Preparation	Rolled: Defined profile curve has to be met by alkaline/alkaline-acid cleaning or by light gritblasting. Cast: Light gritblast. Stainless Steel: Gritblast 3–4 µm/0.1–0.2 mil.
Coating Preparation	Gently mix 15 min or more until contents are homogeneous. Set the mixer speed so that a vortex appears while avoiding air entrapment. We recommend the use of an axial flow impeller. Insufficient mixing can result in application defects.
Filtering	60 mesh (approx. 250 µm) stainless steel or nylon
Application	Spray on. Air pressure of 3–5 kg/cm ² and fluid delivery of 0.8–1.2 mm. HVLP gun air has to be increased. Primer spray preferable with conventional spray gun. Primer has to be stirred in pressure pot at 30 rpm during application.
Recommended DFT*	7–10 µm (0.28–0.40 mil)
Recommended Midcoat/Topcoat	857G-140/857G-240 or 857G-230
Drying (Metal Temp.)	Force dry (Ref. 5–8 min at 120–150 °C (248–302 °F)). Temperature of primer between 35–45 °C (95–113 °F) before application of Midcoat and Topcoat. Application of Midcoat and Topcoat wet on wet.
Curing (Metal Temp.)	See Topcoat Fact Sheet. Baking conditions of the first layer after primer are critical to ensure a good inter-coat adhesion.
Cleanup	Water
Thinner/Additive	Deionized 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 30 rpm) before use.
- Shelf life is 12 months at optimal storage conditions: 18–27 °C (65–80 °F). Maximum storage temperature: 40 °C (105 °F).
- Transport conditions: 5–40 °C (40–105 °F). For safe storage conditions, please refer to the Safety Data Sheet (SDS).
- Water-based 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 U.S. 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 (nonstick, 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, in combination with the above recommended Chemours Topcoats, and presuming appropriate processing by the coater/appliator 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 U.S. 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 Fact Sheet. For details and information, please contact your Chemours representative.

Disposal and Other Considerations

Please follow the guidelines as outlined by The Plastics Industry Association (PIA) or Association of Plastics Manufacturers Europe (PlasticsEurope). For detailed information on health and safety, refer to the SDS.

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 (1475 °F) 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 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.

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