Teflon™ Solvent-Based One Coat

Industrial Coatings

959G-200, 959G-203, 959G-204, 959G-205, 959G-206

Fact Sheet

Teflon™ FEP one coat coatings are suitable for use under moderate abrasion and where nonstick properties contribute to product performance. These products have historically been used as primers for specific applications. Designed for moderate cure temperature, these products can be baked over a broad range of temperatures..

Property Data

Properties[a]	959G-200	959G-203	959G-204	959G-205	959G-206
Color	Clear	Black	Green	Dark Brown	Gray
Closest RAL	—	9004	7008	8015–8016	—
Coverage, m^2/kg (m^2/L) (ft^2/gal)[b]	7.29 (7.62) (311)	7.26 (7.66) (312)	7.34 (7.81) (318)	7.28 (7.80) (318)	7.76 (8.58) (350)
Viscosity, cP[c]	1400–1800	900–1300	900–1300	900–1300	900–1300
Volume Solids, %	18.5–19.5	18.6–19.6	19.0–20.0	19.0–20.0	20.9–21.9
Weight Solids, %[d]	25.5–28.5	23.0–26.0	26.5–29.5	25.8–28.8	28.0–31.0
Density, kg/L (lb/gal)	1.049 (8.75)	1.055 (8.80)	1.064 (8.88)	1.070 (8.93)	1.105 (9.22)
VOC Content, Europe, g/kg[e]	704.3	717.6	682.3	672.3	633.5
Maximum In-Use Temperature, °C (°F)	215 (420)	215 (420)	215 (420)	215 (420)	215 (420)
Flash Point, SETA Closed Cup, °C (°F)	36 (97)	36 (97)	36 (97)	36 (97)	36 (97)

[a]Physical constants are averages only and not to be used as product specifications. They may vary up to ±5% of the values shown.
[b]Theoretical 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.
[c]Brookfield RVT (Measured with spindle 2 at 20 rpm/25 °C [77 °F])
[d]Weight Solids (Measured 30 min x 105 °C [221 °F] + 15 min x 380 °C [716 °F])
[e]Weight % volatiles based on volatiles with vapor pressure ≥ 0.1 hPa. U.S. VOC (ap) and VOC (le) are listed on the U.S. Safety Data Sheet (SDS), available upon request.

Application Method

Substrate	Carbon steel, stainless steel, aluminum, aluminized steel, other suitable. 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	Apply over a clean, roughened surface (recommended profile: Ra 3–4 µm/0.1–0.2 mil).
Coating Preparation	Mix 15 min 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	150 mesh (approx. 100 µm) stainless steel or nylon
Application	Preferably reduced pressure (RP) guns, HVLP or conventional guns are also possible. Nozzle: 1.0–1.4 mm. Atomizing air pressure: 2–4 bar (30–60 psi). For safety reasons, we do not recommend manual electrostatic spray application.
Recommended DFT*	15–20 µm (0.6–0.8 mil). If DFT needs to be higher than 30 µm (1.2 mil), apply in multiple coats.
Drying (Metal Temp.)	5–10 min at 150–170 °C (300–340 °F). If humidity is high, put in oven immediately.
Curing (Metal Temp.)	15 min at 340 °C (645 °F) for max. abrasion resistance or 30 min at min. 255 °C (510 °F) for corrosion resistance and dry lubrication or 30 min at 315 °C (599 °F) for optimum nonstick properties. For intermediate coats, bake 15 min at 150 °C (300 °F) and final bake of 15 min at 345 °C (655 °F).
Cleanup	TN-8596, N-Methyl-Pyrrolidone
Thinner/Additive	TN-8596, TN-8595

*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.

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Handling and Storage

- Gently mix (15 min at 30 rpm) before use.
- Shelf life is 18 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

959G-204 is NOT FDA food contact compliant.

The other products listed in this Fact Sheet, when used in combination with another layer compliant with food legislations, are 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/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 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.

HOW TO USE THE TEFLON™ BRAND NAME WITH YOUR PRODUCT

Teflon™ is a registered trademark of Chemours for its brand of fluoropolymer resins, coatings, films, and dispersions. The Teflon™ brand name is licensed by Chemours in association with approved applications. Without a trademark license, customers may not identify their product with the Teflon™ brand name, as Chemours does not sell such offerings with the Teflon™ trademark. Unlicensed customers may refer to the Chemours product offering with only the Chemours name and product code number descriptor as Chemours sells its product offerings. There are no fair use rights or exhaustion of rights to use the Teflon™ trademark from buying from Chemours, a Chemours customer, or a distributor without a trademark license from Chemours.

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