



**Industrial Coatings** 

# 959G-203, 959G-204, 959G-205

# **Fact Sheet**

Industrial Coatings 959G-2XX are solvent based, one coat, finishes designed for use under moderate abrasion and where nonstick properties contribute to product performance# These nonstick finishes are designed for moderate cure temperature, the performance being function of the cure temperature, In the past the coatings were also used as primers for FEP topcoats, they have been replaced for this purpose by the product line 420G-71x, that outperforms 959G.

## **Property Data 1**

Product Code	959G-203	959G-204	959G-205
Color	Black	Green	Dark Brown
Coverage, <sup>2</sup> m <sup>2</sup> /kg	7.37	7.93	7.49
Viscosity, <sup>3</sup> centipoises	900-1100	900-1100	900-1100
Volume Solids, %	19.34	21.22	20.04
Weight Solids, <sup>4</sup> %	23.5-25.5	27-29	26.8-28.8
Density, kg/l	1.05	1.07	1.07
VOC content, Europe, <sup>5</sup> g/kg	65.40	66.57	64.55
Maximum In-Use Temperature, °C (°F)	260(500)	260(500)	260(500)

<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 3 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

### **Application Method**

Substrate	Any metal substrate except high copper containing alloys
Pre-treatments	Pre-treatments which withstand the curing temperature
Surface Preparation	Degreasing, light grit blasting (recommended Ra = 3-4mm)
Mix well before use	Mix 30 minutes or more. Set the mixer speed so that a strong vortex is appearing. We recommend the use of an axial flow impeller (for instance a propeller blade impeller). Its size should be 10-12 cm for the 4 kg packaging and 17-20 cm for the 20kg packaging. Typically the rotational speed would be in range of 200-500 rpm
Filtering	150 mesh ( appr. 100mm )
Application	Gun: preferable RP (reduced pressure) guns, HVLP or conventional guns are also possible. Nozzle: 1-1.4 mm Pressure: 2-4 bar
Recommended DFT*	15-20 μm per coat
Drying	5-10 minutes at 150-170°C. If humidity is high put in oven immediately
Curing	15 min. at 340°C to develop a max abrasion resistance 30 min. at 250°C is minimum to get corrosion resistance & dry lubrication 30 min. at 315°C is required to get additional non- stick properties.
Multiple coats	If the thickness needs to be higher as 30µm, apply the coating in multiple coats. Dry initial , intermediate coats and topcoat 15 min. at 150°C with a final bake of 15 min. at 345°C
Thinner/Additive	TN-8595

\* 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

- Rolling once a month (15 min. at 30rpm) will be beneficial to the product stability and will reduce the settling.
- Roll before use and bring to room temperature it will facilitate the mixing operation recommended here above before filtering and spray.

• Storage life is 12 months at room temperature(18-27°C) For medical application and development, consult Chemours.

### **Food Contact**

959G-204 is NOT food contact compliant in the United States. 959G-203 and 959G-205 coatings 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 coating will comply with US FDA food contact regulations and can be sold an/or used for food contact applications for nonstick 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/applicator 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 the Regulation (EC) n° 1935/2004. A ny 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

#### **Disposal and Other Considerations**

Please follow the guidelines as outlined by <u>SPI</u> (The Society of the Plastics Industry) or <u>APME</u> (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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