

# **Teflon™ Solvent Based One-Coat**

Industrial Coatings

420G-104, 420G-111, 420G-117, 420G-109, 420G-129

## **Fact Sheet**

Solvent Based PTFE One-Coat with excellent adhesion, durability, heat resistance and non-stick qualities, making this coating a good choice in variety of situations where dry lubrication and release in an abrasive or high-temperature environment are needed.

#### **Property Data 1**

Product Code	420G-104	420G-111	420G-117	420G-109	420G-129
Color	Gray	Pewter	Green	Met. Black	Black
Closest RAL	7001				
Coverage, <sup>2</sup> m <sup>2</sup> /kg (m <sup>2</sup> /L) (ft <sup>2</sup> /gal)	5.3 (5.8) (236)	6.5 (7.2) (293)	5.6 (6.3) (256)	5.1 (5.4) (218)	5.2 (5.4) (221)
Viscosity, <sup>3</sup> centipoises	800 - 1400	700 - 1300	800 - 1400	800 - 1400	800 - 1400
Volume Solids, %	14.1 – 15.1	17.5 – 18.5	15.3 – 16.3	12.9 – 13.9	13.1 – 14.1
Weight Solids, <sup>4</sup> %	24.9 – 27.9	25.5 – 28.5	26.7 – 29.7	20.3 - 23.3	20.6 - 23.6
Density, kg/l (lbs/gal)	1.105 (9.2)	1.107 (9.2)	1.126 (9.4)	1.052 (8.8)	1.052 (8.8)
VOC content, Europe, <sup>5</sup> g/kg	736.0	702.7	717.7	781.3	778.9
Maximum In-Use Temperature, °C (°F)	260 (500)	260 (500)	260 (500)	260 (500)	260 (500)
Flash Point, SETA closed cup, °C (°F)	29 (84)	29 (84)	42 (108)	34 (93)	34 (93)

<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+6'x430°C, 10'x220°C+6'x430°C for 420G-111)

<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**

Substrate	Carbon steel, stainless steel, aluminium, aluminized steel, other suitable. Elements of impurity can have a reverse impact on quality of the coated article. Pre-treatments, 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 1.5 $\mu$ m / 0.06 mil). Adhesion is also excellent over smooth metal. Any residual oil on the surface will affect the color of the cured film and will adversely affect adhesion.
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	100 mesh (approx. 150 μm) stainless steel or nylon
Application	Preferable RP (Reduced Pressure) 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*	20 µm/coat (0.8 mil), can be obtained with several passes of a spray gun - wet on wet.
Drying (metal temp.)	10 minutes at 150-200°C (300-390°F). If humidity is high, put in oven immediately.
Curing (metal temp.)	3-5 min at 400°C (750°F) for dry-lub applications or 10 min at 360-370°C (680-700°F)
Clean up	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



#### 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 30°C (86°F).
- Transport conditions: 5°C-40°C (40°F-105°F). For safe storage conditions, please refer to safety data sheet.

For medical application and development, consult Chemours.

#### **Food Contact**

This product 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.

#### 420G-117 is not FDA compliant.

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 /FC

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, one-coat) 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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