



Teflon™ FEP Powder Topcoats

Industrial Coatings

532G-8110, 532G-8410

Fact Sheet

FEP powders do offer high temperature resistance, excellent release and the ability to uniformly coat various complex shapes with thick or thin films. Molecular weight (MW) of the powder does influence the resistance to mechanical and/or thermal properties, the higher the MW, the higher the resistance of the polymer to fatigue / stress-cracking. Melt Flow Rate (MFR) of the powder does influence application methodology, the higher the MFR, the better the flow & smoother the film.

Property Data ¹

Product Code	532G-8110	532G-8410
Colour	Clear	Clear
Molecular Weight	Standard	High
Melt Flow Rate	High	Standard
Coverage, ² m ² /kg (ft ² /lb)	18.6 (90)	18.6 (90)
Particle size, ³ Average, µm	27 - 57	27 - 57
Bulk Density, g/100 cc	55 - 95	38 - 98
Density, kg/l (lbs/gal)	2.15 (17.9)	2.16 (18.0)
VOC content, Europe, ⁵ g/kg	X.X	
Maximum In-Use Temperature, °C (°F)	204 (400) continuous use	
Dust explosivity, g/l	Negative between 0.154 – 1.54 g/l	no dust explosion risk

¹Physical constants are averages only and are not to be used as product specifications. They may vary up to ±5% of the values shown

²Theoretical 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

³Particle size refers to the average particle size measured by laser diffraction.

⁴Weight % 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	Homogenize powder before opening bag.
Screen	60 mesh (approx. 250 µm) stainless steel or nylon. Insufficient screening can result in application defects.
Application	Use fluidized bed with or without vibration system (depends on powder quantity and particle size of the powder). On flat and/or conductive parts high voltage and higher amperage can be used. On insulated and complex parts amperage should be lowered. In some situations a fixed voltage may be more effective than using an automatic current control setting. The gun settings depend on the gun type and complexity of the part. <u>Recommended general settings:</u> • Product supply: 30%-50% • Air carrier: 3.0 Nm ³ /h • Fluidization bed: 0.3 Nm ³ /h • Electrode fluidization: flat jet 0.2 Nm ³ /h • Amperage: 10 µA • Voltage: 60 KV
Recommended DFT*	25-45 µm (1.0-1.8 mil) per coat
Recommended Primer	420G-7xx, 470G-7xx (EMEA only), 459G-6xx, 532G-42331
Drying (metal temp.)	Powders can be applied dry on wet. Full coating system should be dried before final cure.
Curing (metal temp.)	10-15 minutes at 380-390°C (715-735°F). 532G-8410 can benefit from longer baking (30 minutes) if only one powder layer is applied.
Multiple coats	20-30 min. at 330-345°C (625-655°F).
Additional long bake	90 minutes at 330-345°C (625-655°F) will improve coating properties such as inter-coat adhesion, smoothness, permeation resistance and abrasion resistance.
Repair	Cut out the imperfection-touch up with a spray of powder-bake at 330°C (625°F).

* 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

- Powders should be stored in closed plastic bags.
- Powders may form lumps under prolonged storage; sieving through a coarse screen will restore the powder
- Powders should be usable for an indefinite period of time without caking or deteriorating if stored 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.

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 or www.teflon.com

The Chemours Company
1007 Market Street
P.O. Box 2047
Wilmington, DE 19899
T: +1 302 773 1000

Asia Pacific
The Chemours Chemical
(Shanghai) Co., Ltd.
Shanghai, China
T: +86 21 3862 2888

Europe
Chemours Belgium BVBA
Kallo, Belgium
T: +32 3 730 2211

Latin America
Chemours do Brasil, S.A.
Sao Paulo, Brasil
T: +55 11 2599 8574

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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