

Teflon™ Clear FEP Powders

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. 532G-8110 has a higher melt flow rate and produces smoother surfaces. 532G-8410 has a higher molecular weight and offers better resistance to environmental stress cracking and better retention of mechanical properties after thermal aging.

Property Data 1

Product Code	532G-8110	532G-8410
Color	Clear	Clear
Molecular Weight	Standard	High
Coverage, ² m ² /kg	18.6	18.6
Particle size,3 Average, µm	27 - 57	27 - 57
Bulk Density, g/100 cc	42 - 78	38 - 98
Density, kg/l	2.15	2.16
VOC content, Europe,4 g/kg	0	0
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

Application Method

General Primer	420G-7xx. Apply powder in dry conditioned spray booth, avoid contact with moisture
Screen	Through a 60 mesh (approx. 250 µm) screen
Powder supply Settings	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; Voltage: 20-80 kV Amperage: higher than 10 μA if needed. On insulated and complex parts amperage should be lowered typical indication: 6-10 μA. The gun settings depend on the gun type and the complexity of the part. The given settings are indicative for Gema Optiflex (Optistar) electrostatic gun: Product supply: 30%-50% Air carrier: 3.0 Nm³/h Fluidization bed: 0.3 Nm³/h Electrode fluidization: flat jet 0.2 Nm³/h Amperage: 10 μA Voltage: 60 KV
Recommended DFT*	25-45 μm/coat
Drying	Powders can be applied dry on wet on the primer. Then solvents should be flashed off 10 min. at 150-170°C
Curing (metal temp.)	10-15 min. at 380°C. 532G-8410 can benefit from longer baking if only one powder layer is applied (30 min).
Multiple coats	20-30 min. at 330-345°C.
Long bake	An additional long bake of 90 minutes at 330°C given at the end does improve properties like intercoat adhesion, smoothness, permeation resistance and abrasion resistance.
Repair	Cut out the imperfection-touch up with a spray of powder-bake at 330°C.

^{*} 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



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

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

⁴ Weight % Volatiles based on volatiles with vapor pressure >= 0.1 hPa

Handling and Storage

- Powders must be stored at normal room temperature 18-27 °C (65-80 °F).
- Seal package to avoid excessive humidity or contamination.
- Powders should be usable for an indefinite period of time without caking or deteriorating if properly stored.

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. It can be sold and/or used for food contact applications for non stick 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) no 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 Regulation (EC) No 1935/2004. Any 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 legislation, are available on request.

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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