

DuPont™ 420G-129 One Coat

Industrial Nonstick Coatings

Product Information

DuPont™ 420G-129 has excellent adhesion, durability, heat resistance and non-stick qualities, making this coating a good choice in a variety of situations where dry lubrication and release in an abrasive or high-temperature environment are needed.

Property Data

Product Code	420G-129
Properties ¹	
Color	Black
Coverage, ² m ² /kg, (ft ² /gal)	5.2 (221)
Weight Solids, %	20.1 – 23.1
Volume Solids, %	11.7 – 13.7
Density, kg/L (lb/gal)	1.05 (8.7)
Viscosity ³ , cP	800 – 1400
Maximum In-Use Temperature, °C (°F)	260°C (500°F)
Shipping Class	-100L
Food Contact ⁴	Yes

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

² 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

³ Brookfield RVT (Measured with spindle 2 at 20 RPM/25 °C)

⁴ See Food Contact section



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Application Method - Spray On

Substrate	Carbon steel, aluminum, stainless steel
Surface Preparation	Apply over a clean, roughened surface (recommended profile: 1.5 µm/60 µin). 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	<ol style="list-style-type: none">1. Bring to room temperature and mix or roll thoroughly at 30 rpm for 30–60 min.2. Strain through 100-mesh stainless steel screen.3. Use conventional industrial air-assisted spray equipment. Electrostatic spray application is possible, but the 420G-1XX series line is not suitable for equipment requiring medium to high resistivity finishes.4. No reduction is required. If reduction is desired TN-8595, a 50:50 mixture of NMP:MIBK, may be used. These solvents may also be used for cleanup.
Film Thickness	Single coats of about 20 µm (0.8 mil) dry film thickness are recommended in most cases and can be obtained with several passes of a spray gun - wet on wet.
Curing	<p>Note: All temperatures refer to metal temperature.</p> <p><i>Dry Lube Applications:</i> Bake at 400°C (750°F) for 3 min.</p> <p><i>Food Applications (for optimum release):</i></p> <p>Bake at 370°C (700°F) for 10 min. or 400°C (750°F) for 5 min.</p>
Clean-up	TN-8595, a 50:50 mixture of NMP:MIBK
Thinner / Additive	TN-8595, a 50:50 mixture of NMP:MIBK

All recommendations are based upon best knowledge

Handling and Storage

- Coatings may be stored at normal room temperature 18–27°C (65–80°F) for at least 12–18 months.
- Roll or agitate once a month (30 rpm for 15 minutes) to increase product stability and reduce settling.
- Roll before use at 30 rpm for 30–60 min. It will facilitate the mixing operation recommended here above before filtering and spraying.
- For medical application and development, please consult DuPont.

For detailed information on health and safety, refer to the Material Safety Data Sheet and the latest edition of “The Guide to the Safe Handling of Fluoropolymer Resins,” published by The Society of the Plastics Industry, Inc. (www.fluoropolymers.org) or by PlasticsEurope (www.plasticseurope.org).

Food Contact

420G-129 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 coating will comply with US FDA food contact regulations and can be sold and/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). Certain primer / topcoat combinations may have limitations in some countries.

Any changes or variations in primer/topcoat combinations and/or individual coating thickness from what is indicated in this fact sheet should be assessed for food contact applications prior to its use. Special attention is particularly required to the restrictions applied on the green pigments in the US FDA food contact regulations. For details and information please contact your DuPont 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 28-30 (ex Article 30-36) of the Treaty of Rome as amended. Compositional statements, referring to relevant national legislation, are available on request.

Disposal and Other Considerations

Please follow these disposal guidelines as outlined in “The Guide to the Safe Handling of Fluoropolymer Resins,” (available at www.fluoropolymers.org for download):

- 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 additional information

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CAUTION: Do not use DuPont 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 DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also visit www.teflon.com/industrial to download a copy of the DuPont POLICY Regarding Medical Applications H-50103 and DuPont CAUTION Regarding Medical Applications H-50102.



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