



# Teflon™ Water-Based Primer

## Industrial Coatings

# 699N-129

## Fact Sheet

Water-based primer for ETFE that provides good adhesion on several substrates and a very good thermal stability, allowing it to withstand the repeated and long cure cycles applied to a thick ETFE coating.

### Property Data

Properties <sup>a</sup>	699N-129
Color	Black
Closest RAL	7021
Coverage, m <sup>2</sup> /kg (m <sup>2</sup> /L) (ft <sup>2</sup> /gal) <sup>b</sup>	7.49 (8.47) (345)
Viscosity, cP <sup>c</sup>	150–700
Volume Solids, %	20.7–21.7
Weight Solids, % <sup>d</sup>	29.0–31.0
Density, kg/L (lb/gal)	1.131 (9.44)
VOC Content, Europe, g/kg <sup>e</sup>	75.1
Maximum In-Use Temperature, °C (°F)	See Topcoat
Flash Point, SETA Closed Cup, °C (°F)	None

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

<sup>b</sup>Theoretical coverage at dry film thickness (DFT) of 25 µm (1.0 mil) based on 100% application efficiency. It does not take normal production losses into account.

<sup>c</sup>Brookfield RVT (Measured with spindle 2 at 20 rpm/25 °C [77 °F])

<sup>d</sup>Weight Solids (Measured 30 min x 105 °C [221 °F] + 15 min x 380 °C [716 °F])

<sup>e</sup>Weight % volatiles based on volatiles with vapor pressure > 0.1 hPa. U.S. VOC (ap) and VOC (le) are listed on the U.S. Safety Data Sheet (SDS), available upon request.

### Application Method

Substrate	Carbon steel, stainless steel, aluminum, aluminized steel, other suitable. Elements of impurity can have a reverse impact on quality of the coated article. Pretreatments, 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 3–4 µm/0.1–0.2 mil).
Coating Preparation	Gently mix 15 min or more until contents are homogeneous. Set the mixer speed so that a vortex appears while avoiding air entrapment. We recommend the use of an axial flow impeller. Insufficient mixing can result in application defects.
Filtering	50 mesh (approx. 300 µm) stainless steel or nylon
Application	Reduced pressure (RP), conventional, or HVLP gun. Nozzle: 1.2–1.5 mm. Atomizing air pressure: 2–3 bar (30–45 psi). The primer is to be applied directly after grit blasting and dried as soon as possible.
Recommended DFT*	18 µm (0.7 mil)
Recommended Topcoat	ETFE Powder 532-6118, 532-62xx, 532-63xx, 532-64xx, ETFE Liquid 699-205, 699N-21x
Drying (Metal Temp.)	5–10 min at 100–110 °C (210–230 °F). On steel substrates, it is recommended to dry the primer directly after spray to avoid rust forming.
Curing (Metal Temp.)	See Topcoat Fact Sheet. In case of powder topcoat, the primer can be baked above melting point of the powder to allow hot flocking.
Cleanup	Water
Thinner/Additive	Deionized water

\*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 30 rpm) before use.
- Shelf life is 18 months at optimal storage conditions: 18–27 °C (65–80 °F). Maximum storage temperature: 40 °C (105 °F).
- Transport conditions: 5–40 °C (40–105 °F). For safe storage conditions, please refer to the Safety Data Sheet (SDS).
- Water-based product; protect from freezing.

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 in this Fact Sheet, the fully cured system will comply with U.S. FDA food contact regulations at temperatures up to 121 °C (250 °F). Please note that topcoats, intermediate coats, and primers must all comply for the system to be FDA conforming.

ETFE-based coatings are not compliant with European food legislations.

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, in combination with the above recommended Chemours topcoats, and presuming appropriate processing by the coater/appliator 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 U.S. 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 Fact Sheet. For details and information, please contact your Chemours representative.

## Disposal and Other Considerations

Please follow the guidelines as outlined by The Plastics Industry Association (PIA) or Association of Plastics Manufacturers Europe (PlasticsEurope). For detailed information on health and safety, refer to the SDS.

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 (1475 °F) 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 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.

## HOW TO USE THE TEFLON™ BRAND NAME WITH YOUR PRODUCT

Teflon™ is a registered trademark of Chemours for its brand of fluoropolymer resins, coatings, films, and dispersions. The Teflon™ brand name is licensed by Chemours in association with approved applications. Without a trademark license, customers may not identify their product with the Teflon™ brand name, as Chemours does not sell such offerings with the Teflon™ trademark. Unlicensed customers may refer to the Chemours product offering with only the Chemours name and product code number descriptor as Chemours sells its product offerings. There are no fair use rights or exhaustion of rights to use the Teflon™ trademark from buying from Chemours, a Chemours customer, or a distributor without a trademark license from Chemours.

If you are interested in applying for a trademark licensing agreement for the Teflon™ brand, please visit [www.teflon.com/license](http://www.teflon.com/license)

**CAUTION:** Do not use or resell Chemours materials in medical applications involving implantation in the human body or contact with internal bodily fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information, please contact your Chemours representative. For medical emergencies, spills, or other critical situations, call (866) 595-1473 within the United States. For those outside of the United States, call (302) 773-2000.

The information set forth herein is furnished free of charge and based on technical data that Chemours believes to be reliable. It is intended for use by persons having technical skill, at their own discretion and risk. The handling precaution information contained herein is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Because conditions of product use are outside our control, Chemours makes no warranties, express or implied, and assumes no liability in connection with any use of this information. As with any material, evaluation of any compound under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

NO PART OF THIS MATERIAL MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE WITHOUT THE PRIOR WRITTEN PERMISSION OF CHEMOURS.

For more information, visit [teflon.com/industrial](http://teflon.com/industrial)

For sales and technical support contacts, visit [teflon.com/industrialglobalsupport](http://teflon.com/industrialglobalsupport)

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

© 2018 The Chemours Company FC, LLC. Teflon™ and any associated logos are trademarks or copyrights of The Chemours Company FC, LLC. Chemours™ and the Chemours Logo are trademarks of The Chemours Company.

C-11695 (9/18)