

DuPont™ 857G-018

One Coat Blue

Industrial Nonstick Coatings

Product Information

Product Description

857G-018 is a low VOC water-base One Coat industrial coating designed for use in corrosive environments. It is specifically designed for coating of off-shore fasteners and for use on substrates such as carbon steel, stainless steel, and aluminum. It is applied with conventional spray application equipment and the application equipment may be easily cleaned with just water. A typical application procedure includes spray application with conventional equipment at 2-3 atm (30-45 psi) to a dry film thickness (DFT) of 0.8 to 1.2 mil followed by minimal pre-drying and baking at 232 °C (450 °F) 15 to 20 minutes. The Properties are described below.

Property Data

Product Code	857G-018
Properties¹	
Color	Blue
Coverage, ² m ² /kg	9.64
Weight Solids, %	30 - 34%
Volume Solids, %	24 - 28%
Density, kg/L	1.11
Viscosity ³ , cP	450 - 1000
Maximum In-Use Temperature ⁴ , °C (°F)	204 °C (400 °F)
VOC content, US gm/L (less exempt)	304
Flash Point, SETA closed cup, °C (°F)	Above 93 °C (+200L)
Food Contact	Not for Food Contact Usage

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 The coating can survive a peak excursion temperature up to 260°C (500 °F).



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Application Method

Substrate	Carbon steel, stainless steel, aluminum, except high copper containing alloys
Surface Preparation	<p>For aluminum, stainless steel, and carbon steel:</p> <ol style="list-style-type: none">1. Clean (vapor degrease, prebake, or other).2. Lightly grit-blast with aluminum oxide (eg. 120-180 microns). Other pretreatments for corrosion resistance can be carried out as well prior to application of the coating to the part. Application of conversion coatings is suggested where grit blasting is not practical and/or where additional corrosion protection is specified. <p>The coating should be applied immediately after blasting on carbon steel to avoid flash rusting. If a conversion coating is applied, 857G-018 should then be applied before the reported shelf life of the applied conversion coating is realized.</p>
Application	<ol style="list-style-type: none">1. Bring material to room temperature (21 to 26 °C (70 to 79 °F) is optimal).2. Mix thoroughly and filter the material through a 100-mesh stainless steel screen (0.146 mm openings). Use conventional industrial spray equipment.3. Apply at a minimum dry film thickness of 20 to 30 microns (0.8 to 1.2 mil). Higher film thicknesses are possible.
Drying/Baking	<p>Typical Drying and Baking</p> <p>The required bake window for this product is 15 to 20 minutes at a metal temperature of 232 to 260 °C (450 to 500 °F). The optimum temperature and time will depend on the size and mass of the part. An uncoated part should be measured by thermocouple to ensure that the substrate stays within the proper bake window during the processing of the part.</p>

Handling and Storage

Storage life is 12 months at optimal storage temperature.

- Optimal Storage temperature 18–24 °C (65–75 °F).
- Roll for 30 minutes at 30 RPM once per month.
- Warm containers to room temperature and roll completely before use.

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

Food Contact

Not food grade approved

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 more information on
DuPont Industrial Nonstick Coatings, please visit
www.teflon.com/industrialglobalsupport

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