

# DuPont™ MJ-501 Topcoat

## Industrial Nonstick Coatings

### Product Information

MP-501 powder offers high-temperature resistance, excellent release, and the ability to uniformly coat various complex shapes with thick or thin films. This powder can be used as an intermediate or topcoat to attain thicker films in excess of 640 µm (25 mil).

### Property Data

Product Code	MJ-501
<b>Properties<sup>1</sup></b>	
Color	Ivory
Coverage, <sup>2</sup> m <sup>2</sup> /kg, (ft <sup>2</sup> /lb)	18.7 ( 90.5 )
Density, kg/L (lb/gal)	2.12 ( 17.7 )
Maximum In-Use Temperature, °C (°F)	260 °C ( 500 °F )
Food Contact <sup>3</sup>	No

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

<sup>2</sup> 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

<sup>3</sup> See Food Contact Section



*The miracles of science™*

## Application Method

<b>Substrate</b>	Carbon steel, stainless steel, aluminum, except high copper containing alloys
<b>Surface Preparation</b>	Apply over clean, blasted surface. For optimum adhesion, apply primers in a light coating 5–8 µm (0.2–0.3 mil). Any residual oil on the surface can adversely affect adhesion.
<b>Recommended Primers</b>	<b>420G-703</b> <b>850G-XXX</b> <b>959G-203 / 959G-205</b> <b>855G-XXX</b>
<b>Application</b>	Screen powder through 60-mesh screen before use. Use conventional industrial electrostatic powder spray equipment or fluidized bed. Keep electrostatic spray equipment voltage at the lowest level possible to maintain particle charge in order to prevent film builds from exceeding the critical film thickness. Excessive powder builds could lead to bubbling, blistering, and uneven films after baking.
<b>Dry Film Thickness</b>	Up to 150 µm (6 mil) per coat, to 640+ µm (25+ mil) total
<b>Bake</b>	Intermediate - Bake the first coat 5 min at 400 °C (750 °F). Bake subsequent coats 5 min at 385 °C (725 °F).  Topcoat - To reduce porosity of MJ-501, a topcoat of 532G-5010 can be applied up to 75 µm (3 mil) per coat. Each coat is then baked 10 min at 370 °C (700 °F)

## Handling and Storage

Powder may be stored at normal room temperature, 18–27 °C (65–80 °F). Product should be stored in sealed plastic bags to avoid picking up excessive moisture or contamination.

MJ-501 powder should be usable for an indefinite period without caking or deteriorating under properly stored conditions.

- 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](http://www.fluoropolymers.org)) or by PlasticsEurope ([www.plasticseurope.org](http://www.plasticseurope.org)).**

## Food Contact

MJ-501 does not comply with FDA Regulations in 21 CFR governing components of coatings for direct food contact.

## 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](http://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](http://www.teflon.com/industrialglobalsupport)**  
**DuPont**  
**Wilmington, Delaware, USA**  
**Phone: U.S. callers: 1-866-205-1664**  
**Fax: (302) 351-7264**  
**P.O. Box 80702**  
**Wilmington, DE 19880-0702**

Copyright© 2012 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, The miracles of science™, and Teflon® are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates. K-26074 9/12

Teflon® is a registered trademark of E.I. du Pont de Nemours and Company, only available for use under license and subject to qualification.

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 DUPONT.

All technical advice, recommendations and services are rendered by Seller free of charge. They are based on technical data which the Seller believes to be reliable, and are intended for use by persons having skill and know-how, at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Such recommendations and technical advice or services are not to be taken as a license to operate under or intended to suggest infringement of any existing patent. All coverage figures are based on 100% application efficiency. These calculations do not take into account normal losses due to production conditions.

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](http://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.



*The miracles of science™*