

## 3M™ Dynamar™ Polymer Processing Additive FX 5922

### Product Description

Dynamar PPA FX 5922 is a free-flowing fluoropolymer-based processing additive that is designed for use at very low levels to improve the processing of polyolefins. At the very low use levels (typically 100 – 800 ppm) necessary to improve processing, it does not alter or detract from the good physical properties associated with high strength plastics.

### Special Features

- Broadens extrusion processing capabilities of polyolefin resins
- Lowers apparent melt viscosity
- Eliminates melt fracture
- Reduces or eliminates die build-up
- Ideal for use in polyolefin resins containing anti-blocking agents, pigments and other inorganic additives
- For use at very low levels
- Free-flowing fluoropolymer-based processing additive
- Can offer performance and cost advantages

Properties	Test method	Unit	Value
Active Ingredients		%	97
Bulk Density		g/cm <sup>3</sup>	0.7
Colour			White to Off-White
Inorganic Additives		%	3
Particle Size		mesh	approx. < 10
Typical Use Levels		ppm	100 – 800

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### Typical Properties

Dynamar PPA FX 5922 lowers apparent melt viscosity and permits fabricators to use high strength resins which otherwise could not be processed on available equipment. As a processing additive Dynamar PPA FX 5922 can reduce or eliminate melt fracture and can reduce extruder torque. Through optimization of the extrusion process, the use of FX 5922 may also allow an increase in output and yield films with enhanced and balanced bi-directional physical properties and improved clarity and gloss.

### Typical Applications

Dynamar PPA FX 5922 can offer performance and cost advantages. It exhibits exceptional commercial utility in low melt index film grade linear low density polyethylene (LLPDE) and high density polyethylene (HDPE). It is especially effective in polyolefin resins containing talc and silica-based anti-blocking agents, titanium dioxide-based pigments, and other inorganic additives. It can also be used at low levels to reduce extruder die build-up when processing LDPE, EVA and other polyolefin resins.

### Processing Recommendations

To be effective, FX 5922 must be melt blended into the host resin at any of the following stages prior to conversion into extruded products.

- **Resin Producer**
  - Direct addition (See 3M™ Dynamar™ PPAs “Direct Addition During Resin Manufacture Guidelines”)
  - Use a concentrate containing FX 5922 and let down at appropriate level
- **Concentrate Producer**
  - See 3M™ Dynamar™ PPAs “Concentrate Preparation Guidelines”
- **End User**
  - Source resin containing FX 5922 from a resin producer
  - Source a concentrate containing 2-6 % FX 5922 and let down at appropriate level

When processing resins containing Dynamar PPA FX 5922, the benefits may not be noticed immediately. Once enough resin has been processed to coat the surface of the extruder die, effects such as gradual elimination of melt fracture and stable die pressure will become increasingly apparent. This lag time can be reduced significantly by thoroughly cleaning then either preconditioning the extrusion equipment with a concentrate of Dynamar PPA FX 5922 or starting out with a higher concentration of FX 5922. See the “3M™ Dynamar™ PPA Evaluation Guidelines” for more details on running Dynamar Polymer Processing Additives.

### Storage and Handling

Dynamar PPA FX 5922 should be stored in a clean dry environment at temperatures below 27°C (80°F) to prevent agglomeration and ensure long-term storage. Please refer to the Material Safety Data Sheet for additional information about handling.

### Safety Instructions

Follow the normal precautions observed with all fluoropolymer materials.

Please consult the Material Safety Data Sheet and Product Label for information regarding the safe handling of the material. By following all precautions and safety measures, processing these products poses no known health risks. General handling/processing precautions include: 1) Process only in well-ventilated areas. 2) Do not smoke in areas contaminated with powder/residue from these products. 3) Avoid eye contact. 4) If any skin comes into contact with these products during handling, wash with soap and water afterwards. 5) Avoid contact with hot fluoropolymer.

Potential hazards, including release of toxic vapours, can arise if processing occurs under excessively high temperature conditions. Vapour extractor units should be installed above processing equipment. When cleaning processing equipment, do not burn off any of this product with a naked flame or in a furnace.

### Delivery Form

Dynamar PPA FX 5922 is delivered in granular form.

Packaging size:

- 20 kg cardboard box, containing one PE-bag with 20 kg content

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### Important Notice

All information set forth herein is based on our present state of knowledge and is intended to provide general notes regarding products and their uses. It should not therefore be construed as a guarantee of specific properties of the products described or their suitability for a particular application. Because conditions of product use are outside Dyneon's control and vary widely, user must evaluate and determine whether a Dyneon product will be suitable for user's intended application before using it.

The quality of our products is warranted under our General Terms and Conditions of Sale as now are or hereafter may be in force.

Technical information, test data, and advice provided by Dyneon personnel are based on information and tests we believe are reliable and are intended for persons with knowledge and technical skills sufficient to analyze test types and conditions, and to handle and use raw polymers and related compounding ingredients.

No license under any Dyneon or third party intellectual rights is granted or implied by virtue of this information.

General recommendations on health and safety in processing, on work hygiene and on measures to be taken in the event of accident are detailed in our material safety data sheets.

You will find further notes on the safe handling of fluoropolymers in the brochure "[Guide for the safe handling of Fluoropolymers Resins](#)" (download link) by PlasticsEurope, Box 3, B-1160 Brussels, Tel. +32 (2) 676 17 32.

You can also download it using the QR code below with your smartphone.



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