

3M™ Dynamar™

Polymer Processing Additive

FX 5925M

Product Description

Dynamar FX 5925M is a free-flowing fluoropolymer-based processing additive that is designed for use at low levels to improve the processing of polyolefins. At the low use levels (typically 200 – 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
- For use at low levels
- Free-flowing fluoropolymer-based processing additive
- Can offer performance and cost advantages

Properties	Test method	Unit	Value*
Active Ingredients		%	98
Bulk Density		g/cm ³	0.7
Color			White to Off-White
Inorganic Additives		%	2
Particle Size		mesh	Approx. <10
Typical Use Levels		ppm	200 – 800

*typical values

3M™ Dynamar™

Polymer Processing Additive

FX 5925M

Typical Properties

Dynamar FX 5925M 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 FX 5925M can reduce or eliminate melt fracture and can reduce extruder torque. Through optimization of the extrusion process, the use of FX 5925M 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 FX 5925M 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 also 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 5925M must be melt blended into the host resin at any of the following stages prior to conversion into extruded products.

- **Concentrate Producer / Masterbatch producer**
 - See 3M™ Dynamar™ Polymer Processing Additives [“Concentrate Preparation Guidelines”](#)
- **End User**
 - Source a concentrate containing 2 - 6 % FX 5925M and let down at appropriate level. See [“Par bomb analytical method”](#) to determine the Fluorine level.

When processing resins containing Dynamar FX 5925M, 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 thorough cleaning, followed by either preconditioning the equipment with a concentrate of Dynamar FX 5925M, or starting out with a higher concentration of FX 5925M. See the [“3M™ Dynamar™ Polymer Processing Additives Evaluation Guidelines”](#) for more details on processing Dynamar Polymer Processing Additives.

Storage and Handling

Dynamar FX 5925M 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 Safety Data Sheet (SDS) valid in your country of reference for additional information about handling. Please consult our [Global 3M SDS Search](#) for details.

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 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 vapors, can arise if processing occurs under excessively high temperature conditions. Vapor 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

3M™ Dynamar™ Polymer Processing Additive FX 5925M is delivered in granular form.

Packaging size:

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

3M™ Dynamar™

Polymer Processing Additive

FX 5925M

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 with your smartphone using the QR code below.



Customer Service

Europe

Phone: 00 800 396 366 27
Fax: 00 800 396 366 39

Italy

Phone: 800 7 910 18
Fax: 800 7 810 19

USA

Phone : +1 800 810 8499
Fax : +1 800 635 8061

Technical Service Fluoroplastics

Dyneon GmbH
3M Advanced Materials Division
Industrieparkstraße 1
84508 Burgkirchen
Germany
Phone: +49 8679 7 4709
Fax : +49 8679 7 5037

Technical Service Fluoroelastomers & Polymer Processing Additives

3M Belgium BVBA / SPRL
3M Advanced Materials Division
Canadastraat 11,
Haven 1005
2070 Zwijndrecht
Belgium
Phone: +32 3 250 7868
Fax: +32 3 250 7905

Technical Service PTFE Compounds

Dyneon B.V.
3M Advanced Materials Division
Tunnelweg 95
6468 EJ Kerkrade
The Netherlands
Phone: +31 45 567 9600
Fax: +31 45 567 9619

We will gladly supply further contact details for our full network of global sales offices. Alternatively, find them [here](#).



Web Site: www.dyneon.eu

Printed in Germany
© Dyneon 2021
Status: Jan. 2021

3M, Dyneon and Dynamar are Trademarks of 3M Company.
All Rights reserved. The present edition replaces all previous versions. Its content is being continuously adjusted to reflect the current level of knowledge. Please make sure and inquire if in doubt whether you have the latest edition.