



Dyneon™

TF 9207 Z PTFE

Micropowder

Dyneon™ TF 9207 Z PTFE micropowders can be used as an additive in many different applications and at concentrations typically from 5 to 20%.

Homogenous incorporation is the single most important process and application consideration. Due to poor flow properties of the micropowder it is recommended that the micropowder and matrix material both be at a temperature below 30° C. However, in the case of thermoplastic blends, the micropowder may be incorporated into the melt. High speed mixers and tumble mixers have proven successful for dry blends, while propeller mixers work well for wet mixtures such as solvents and oils. Gladd bead mills should be used for relatively high viscosity mixtures and roll mills for very high viscosity applications, such as lubricating greases and oils.

Product Features:

- Low molecular weight virgin PTFE (non- degraded)
- Agglomerate particles
- Easily deagglomerated when incorporated into other matrices

Used as an additive to:

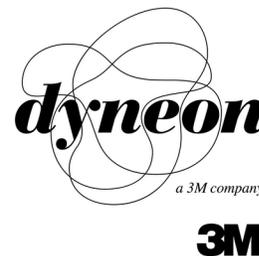
- Improve non-stick properties
- Reduce coefficient of friction
- Increase wear resistance of matrix material

Typical Properties (Not for specification purposes)

Property	Test Method	Unit	Value
Average particle size	ISO 13321	nm	4
Primary particle size	Dyneon 426	nm	120
Bulk density	ASTM D4895	g/l	280
Specific surface area BET	DIN 66132	m ² /g	17
Melt flow Index (372 C/2.16 kg)	ASTM 1238-98	g/10 min	4

Product Form and Packaging

Dyneon™ TF 9207 Z PTFE is supplied in 25 kg (55 lb) cartons with PE liner or large cartons containing 12x25 kg PE bags.



Our Worldwide Commitment to Quality

Indicative of our commitment, most Dyneon design, development, production and service facilities have achieved global quality management certification. Production facilities have also received certification for their environmental management system. Please see the Dyneon website (www.dyneon.com) for the most up-to-date certification details.

Storage and Material Handling

Dyneon TF 9207 Z PTFE has an unlimited shelf life provided it is stored in a clean, dry place. Dyneon TF 9207 Z PTFE is hydrophobic, and generally does not require drying before processing unless high humidity conditions create surface moisture adsorption.

Food Contact/FDA Regulatory Statement

The use of Dyneon™ TF 9207 Z PTFE Micropowder for food contact use is exempt under 21 C.F.R. 170.39 (threshold of regulation for substances used in food-contact articles) from the need of being the subject of a food additive regulation or Food Contact Notification (FCN), provided that the PTFE micropowder complies with the applicable provisions for PTFE micropowders, including specifications, conditions of use, and limitations, described in 21 C.F.R. 177.1550, including paragraphs (b), (e), and (f).

Dyneon makes no recommendation about the suitability of this Dyneon product in the user's intended application. It is user's responsibility to determine whether its use of Dyneon products in a particular application is suitable and will comply with applicable laws and regulations. As appropriate, the user is also responsible for testing its finished product(s) made with Dyneon products to ensure compliance with any applicable specifications, conditions of use, and limitations (including extractives limitations) under applicable laws and regulations such as 21 C.F.R. 177.1550.

Safety/Toxicology

This is a PTFE material, so normal precautions observed with PTFE should be followed. Before processing this product, be sure to read and follow all precautions and directions for use contained in the product label and the Material Safety Data Sheet. General handling/processing precautions include: (1) Process only in well-ventilated areas; (2) Do not smoke in areas contaminated with powder/residue from this product; (3) Avoid eye contact; (4) After handling this product wash any contacted skin with soap and water; (5) Avoid contact with hot fluoropolymer. Potential hazards, including evolution of toxic vapors, can exist if processing occurs under excessively high temperature conditions. Appropriate local exhaust ventilation such as vapor extractor units should be installed above processing equipment. When cleaning processing equipment, do not burn off any of this product with an open flame or in a furnace.

Technical Information and Test Data

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.

Important Notice:

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 following is made in lieu of all express and implied warranties (including warranties of merchantability and fitness for a particular purpose): If a Dyneon product is proved to be defective, Dyneon's only obligation, and user's only remedy, will be, at Dyneon's option, to replace the quantity of product shown to be defective when user received it or to refund user's purchase price. In no event will Dyneon be liable for any direct, indirect, special, incidental, or consequential loss or damage, regardless of legal theory, such as breach of warranty or contract, negligence, or strict liability.

Product Stewardship -Replacement Emulsifier Dyneon fluoroplastic products identified with a "Z" following the product name indicate products that are made using Dyneon's new Replacement Emulsifier. The new emulsifier is a polymerization aid used to manufacture certain fluoropolymers and is not an intended ingredient in the polymers. The new emulsifier eliminates the use of the former polymerization aid, APFO (ammonium perfluorooctanoate, the ammonium salt of perfluorooctanoic acid (PFOA)), in the manufacture of these fluoropolymers. The use of the Replacement Emulsifier in the manufacture of these Dyneon products is consistent with Dyneon's product stewardship principles and our commitment to US EPA's Voluntary PFOA Stewardship Program under which fluoropolymer manufacturers agreed to work towards eliminating PFOA in emissions and product content by the year 2015. Dyneon is pleased to report that we will have completely eliminated the use of APFO in our manufacturing processes by the end of December 2008.

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