

Engineered to Survive



High-performance fluoropolymers for demanding environments

Only the most advanced materials can survive the harsh conditions encountered in oil and gas drilling and production. From downhole drilling to pipeline distribution systems and refinery operations, 3M™ Dyneon™ Fluoropolymers stand up to today's toughest challenges. 3M offers a broad range of fluoroelastomers and PTFE compounds that withstand extreme temperatures and resist permeation and chemical attack from sour gas, amine corrosion inhibitors, acids and steam.

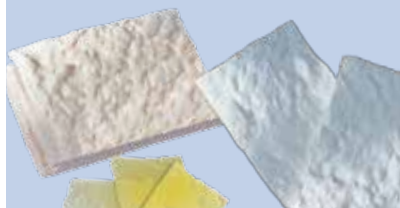
3M™ Dyneon™ PTFE

- Low friction, non-stick properties
- Enhanced wear resistance
- Excellent chemical resistance
- Lower deformation under load
- Long-term durability
- Very wide service temperature range: -200°C to 260°C



3M™ Dyneon™ Fluoroelastomers

- Chemical resistance to production fluids, injection fluids, produced gases
- Resistance to explosive decompression
- Adhesion to metal substrates
- Service temperatures ranging from -40°C to 315°C



Oil & Gas Applications for 3M™ Dyneon™ Fluoropolymers

- Downhole packers
- Seals and gaskets
- Blowout preventers
- Riser liners
- Valve and pump components
- Progressive cavity pump stators
- Diaphragms
- Tubing



Technical Resources

3M Application and Product Development Engineers and Chemists can help you find the right polymer for your application. Contact us today at www.3M.com/advancedmaterials.

3M™ Dyneon™ Fluoroelastomers

3M offers over 50 grades of fluoroelastomers, providing sealing and performance solutions for a wide variety of applications.

- **Perfluoroelastomers** feature outstanding chemical and thermal resistance, for performance where other materials fail
- **Low temperature fluoroelastomers** for true dynamic sealing capability at low temperatures
- **Base resistant elastomers** for outstanding resistance to amines and other aggressive, low pH chemicals

3M™ Dyneon™ PTFE

The unique properties of PTFE have made it an indispensable material for a wide variety of industries. 3M™ Dyneon™ PTFE can help extend equipment life in the presence of harsh chemicals, near hot-running parts or in cold environments. Its low coefficient of friction makes PTFE ideal for sliding elements, seals and process control equipment.

3M offers a broad range of virgin and compounded grades, including standard, free-flowing and pre-sintered. In addition, custom formulated PTFE compounds are available, including high-purity 3M™ Dyneon™ TFM™ PTFE.

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