Advanced Engineering Plastics for **Turbo Compressors**

SIMPLY NO L SUBSTITUTE

DIFFUSERS AND SHROUDS



Do you want to tighten the clearance between your diffuser and impeller? Have you ever replaced an impeller due to rubbing?

Quadrant Fluorosint® 500 material has been the industry standard for abradable polymer seals for over forty years. In gas distribution pump systems, surges are common. To off set the problem large clearances between impellers and diffusers are established and leads to low efficient machines. To reduce the clearance and improve compressor performance adding Quadrant Fluorosint® 500 shroud inserts is the answer. As a bonus, along with the efficiency gains, Quadrant Fluorosint® 500 becomes the sacrificial component keeping the high priced impeller from being destroyed if contact is made.

Trends In Turbo Compressor Market

- · Improved efficiency and reliability in compressors
- Eliminate destruction of impeller in surged compressors
- Reduced chemical corrosion
- Provide longer life material than thin coated films
- · Cost effective solutions, ease to manufacture

Quadrant Answers

- Quadrant Fluorosint® 500 stiffness at elevated temperature
- Coefficient of Linear Thermal Expansion similar to aluminum
- · High resistance to fuels, lubricants and chemicals
- Near net shapes, machining and molded parts

Key Benefits

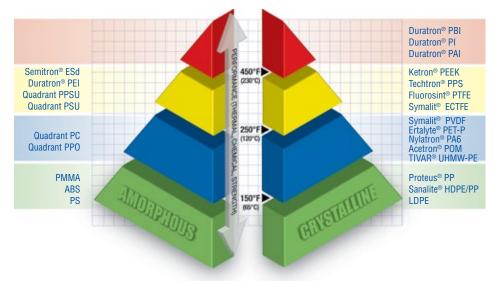
- Increased compressor efficiency
- · Reduced repair on impellers
- · Increased design capabilities
- · Reduced downtime
- · Lower cost in service
- NEW NORSOK M-710 (sour gas aging) compliance for Ketron® PEEK stock shapes



Performance Advantages Start Here!

Explore the industry's broadest family of engineering plastic products, Online! The perfect match for your application, environment and performance level is just a few clicks away.

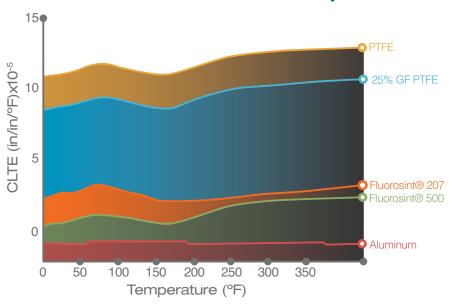




Deformation Under Load

FLUOROSINT® MT-01 FLUOROSINT® 500 FLUOROSINT® 135 - Proprietary Filled PTFE RULON® J FLUOROSINT® HPV 55% BRONZE, 5% MoS₂, PTFE FLUOROSINT® 207 25% GF PTFE PTFE 0 2 4 6 8 10 % DEFORMATION @2000psi, 122°F (50°C)

Coefficients of Linear Thermal Expansion



All statements, technical information and recommendations contained in this publication are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Quadrant Engineering Plastic Products does not guarantee the accuracy or completeness of this information and it is the customer's responsibility to determine the suitability of Quadrant's products in any given application.

Acetron, Duraspin, Duratron, Erta, Ertacetal, Ertalene, Ertalon, Ertalyte, Extreme Materials, Fluorosint, Ketron, MC, Monocast, Novatron, Nylatrack, Nylatron, Polypenco, Proteus, Sanalite, Semitron, Symalit, Techtron, TIVAR, Ultrawear and Vibratuf are registered trademarks of the Quadrant group of companies. *Classix is a registered trademark of Invibio Ltd. Corp. *Rulon is a registered trademark of Saint Gobain Performance Plastics *Torlon is a registered trademark of Solvay Advanced Polymers *Vespel is a registered trademark of E.I. DuPont

2010© the Quadrant group of companies, 2120 Fairmont Avenue; PO Box 14235 - Reading, PA 19612-4235; USA



Distributed by: