

Lead-free elastomer alternative sets new high performance sealing standard for large diesel engines

As large diesel engine businesses and their customers look for high performance, cost-effective alternatives to lead-cured, litharge, seals for engine, valve seats and liner rings, Precision Polymer Engineering (PPE) announces the introduction of two lead-free materials V75J and V76F. These steam-resistant fluoroelastomers (FKM) are designed specifically for large power generation and marine propulsion engines and offer improved in-service performance over lead-cured seals.

Litharge curing involves adding lead oxide during seal manufacture to increase steam resistance of fluorocarbon elastomers used in large diesel engines. However health and safety concerns regarding lead exposure during elastomer manufacture resulted in a major decline in the availability of these materials.

Both V75J and V76F elastomers are peroxide-cured terpolymers formulated for high performance sealing applications in diesel engines. They provide resistance to hot water and steam (above 150°C/302°F) without the use of litharge (lead oxide) curatives. In addition both of these PPE materials offer increased resistance to acids, oils, coolants and hydraulic fluids, making them ideal for use in critical engine locations.

David Holt, PPE sales director, commented, “ Diesel engine manufacturers now have realistic alternatives that are lead-free and offer improved long-term sealing performance over litharge-cured seals. V75J and V76F are a ‘new generation’ of steam resistant fluoroelastomers that establish the benchmark in elastomer seal performance.”

Other PPE diesel engine sealing materials include A75H (FEPDM) Aflas material, E70K (EPDM) peroxide-cured material and Perlast G75B and G80A (FFKM) perfluoroelastomers.

For more information on the lead-free fluoroelastomers contact PPE on +44 (0)1254 295400, e-mail sales@prepol.com and web site www.prepol.com.