

DuPont™ Kalrez® Spectrum™ 7275 Perfluoroelastomer Parts

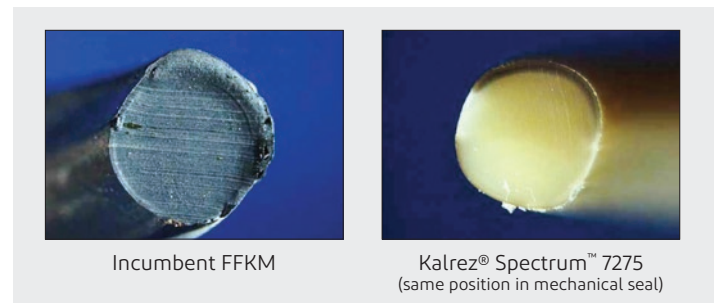
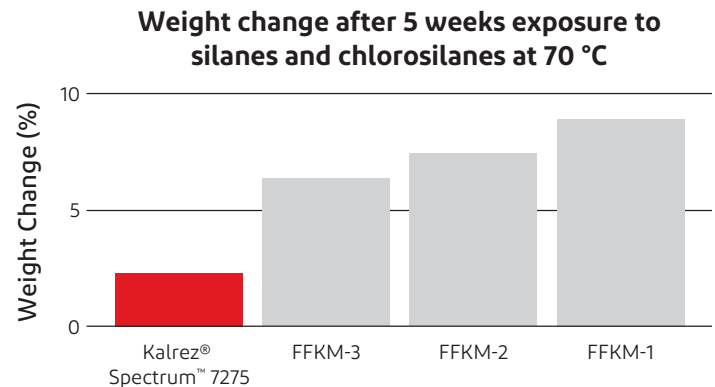
O-rings for mechanical seals in silicon chemicals

Silicon chemicals are used to manufacture a wide range of industrial materials including coatings, adhesives or elastomers. Chlorosilanes, a very reactive group of chemical compounds, are used as the main base material for the manufacturing of microelectronics. After trying different FFKMs, a major manufacturer of silicon chemicals has selected Kalrez® Spectrum™ 7275 as the preferred elastomer for mechanical seals of pumps handling aggressive silanes and chlorosilanes.

- **Chemicals and cleaning:** Silanes and chlorosilanes
- **Process conditions:** Above 110 °C
- **Incumbent solution:** Various competitive FFKM
- **Performance challenge:** Insufficient lifetime vs. customer expectations (swelling and blistering)

Kalrez® Spectrum™ 7275 benefits:

- Kalrez® Spectrum™ 7275 O-rings extended the Mean Time Between Repair (MTBR) of this mechanical seal by at least 30%.
- While the incumbent FFKM O-ring showed signs of severe swelling and blistering, Kalrez® Spectrum™ 7275 seal had only superficial color change, with minimum swelling and unchanged flexibility (see pictures).



The performance is based on tests performed by the customer. Since conditions of use are outside DuPont's control, DuPont assumes no liability in connection with any use of this information. This data should not be used to establish specification limits.

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(02/2022) Reference: KZE-A40075-00-B0222