# OUPONT

## DuPont<sup>™</sup> Kalrez<sup>®</sup> Spectrum<sup>™</sup> 6380 Perfluoroelastomer Parts For Amine Units in Oil Refineries / Gas Plants

Oil refineries and natural gas plants use amine units to remove sour gasses like H<sub>2</sub>S (hydrogen sulfide) from product streams through a process commonly referred to as sweetening which requires various concentrations of alkylamines in aqueous solution. While this is an effective process it can often damage elastomers by causing them to swell and ultimately lose the desired mechanical properties. This can cause extrusion of the seal outside the groove, rupture of the fluid film in mechanical seals due to face seal deformation, leakage and increase in the torque needed to operate a valve.

• Chemicals:	Amines
Process conditions:	H₂S removal ("gas sweetening process") operates at temperatures up to 140 °C
Incumbent solution:	FKM, competitive FFKM
Incumbent performance:	High level of volume swell leading to early failure

### Kalrez<sup>®</sup> Spectrum<sup>™</sup> 6380 performance:

- Outstanding resistance to amines and strong oxidizers, leading to reduced leakage and extended MTBR (Mean Time Between Repairs)
- Allows for improved reliability, lower maintenance costs and emissions.



#### Aging in 50% H<sub>2</sub>0 / 50% Diglycolamine<sup>o</sup> (GDA<sup>o</sup>) at 140 °C (AS568-214 O-rings – ISO 1817)

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