Norell, Inc. is delighted to present the Extreme Series line of High Pressure Valved NMR Sample Tubes. The Extreme Series remains similar in function, use and pressure capability to the traditional High Pressure Valved NMR Sample Tubes, but the PTFE fluoropolymer valve plug has been upgraded and improved by changes to the design of the o-ring seal.

The Extreme Series line consists of three categories: Level 1, Level 2 and Level 3. Each level incorporates a certain higher degree of valve seal integrity to guard against leakage or pressure loss due to o-ring failure caused by wear or other physical damage, and/or deterioration or damage caused by chemical exposure.

**Why Kalrez®?**
Kalrez® furnishes the same unsurpassed chemical resistance and degree of inertness as that of PTFE, while also affording a higher service temperature limit (up to 288 degrees C for PTFE) and no propensity to cold flow (or distort under a constant mechanical force or pressure).

**Ultimate Protection: Level 3**
Level 3 utilizes two Kalrez® perfluoroelastomer o-rings, offering the ultimate level of physical and chemical resistance with the inclusion of a secondary, backup o-ring.

**Premium Protection: Level 2**
Level 2 contains a single Kalrez® o-ring, thereby providing superior chemical resistance and inertness to almost all chemical types, while minimizing the extra cost associated with Kalrez® o-rings.

**Base Protection: Level 1**
In Level 1, the Extreme Series High Pressure Valved NMR Sample Tubes include an additional standard fluoroelastomer o-ring seal to augment the existing fluoroelastomer o-ring, thus providing a secondary, backup o-ring if the primary one leaks or fails because of wear or physical damage.
What is Kalrez®?

Kalrez® perfluoroelastomer is made from tetrafluoroethylene, and so is virtually chemically identical to PTFE fluoropolymer, but physically Kalrez® behaves as an elastomeric material, unlike PTFE, which is a much harder and inflexible polymer.

Kalrez® furnishes the same unsurpassed chemical resistance and degree of inertness as that of PTFE, while also affording a higher service temperature limit (up to 288°C compared to 260°C for PTFE) and no propensity to cold flow (or distort under a constant mechanical force or pressure).