THE CLAIMS

What is claimed is:

1. A supply vessel for dispensing of ultra-high purity chemical reagents, comprising:
a metal container comprising a removable cover defining an enclosable interior volume including interior surface structure coated with an ultra-high purity effective polyperfluoroalkoxyethylene coating, wherein the ultra-high purity effective polyperfluoroalkoxyethylene coating has a thickness in a range of from 2.5 to 12 mils and is not blended with another copolymer, and wherein the interior surface structure includes a container side wall, floor, and cover surfaces bounding the interior volume and outer surfaces of a discharge conduit and a float sensor within the interior volume.

2. The supply vessel of claim 1, wherein the container is additionally coated with the ultra-high purity effective polyperfluoroalkoxyethylene coating on exterior surfaces thereof.

3. The supply vessel of claim 1, wherein the removable cover comprises spaced apart inlet and outlet passages therein.

4. The supply vessel of claim 3, wherein the outlet passage communicates with a discharge conduit joined to the cover and extending into a lower portion of the interior volume of the supply vessel.

5. The supply vessel of claim 1, wherein the metal container is fabricated of a metal selected from the group consisting of steel, titanium, and aluminum.

6. The supply vessel of claim 1, wherein the metal container is fabricated of stainless steel.

7. The supply vessel of claim 1, comprised in an ultra-high purity deionized water dispensing apparatus.

8. The supply vessel of claim 1, comprised in a semiconductor manufacturing tool.

9. The supply vessel of claim 1, wherein the ultra-high purity effective polyperfluoroalkoxyethylene coating is applied by powder coating.