CLAIMS

1. A composition comprising an alumina based catalyst having less than about 12 wt% of a Group VI metal and from about 0 to about 10 wt % of a Group 14 metal.

2. The composition of claim 1 having a pore volume in pores of greater than 350Å pore diameter of less than 10% of Total Pore Volume.

3. The composition of claim 1 having a median pore diameter by volume ranging from about 55 to about 95 Å.

4. The composition of claim 1 having a water pore volume ranging from about 0.5 to about 1.0 cc/g.

5. The composition of claim 1 having a surface area of greater than 200 m^2/g.

6. The composition of claim 1, wherein the Group 14 metal is silicon.

7. The composition of claim 6, wherein the amount of silicon ranges from about 1.0 to about 5.0 wt%.

8. The composition of claim 1, wherein the Group 6 metal is molybdenum.

9. The composition of claim 8, wherein the amount of molybdenum ranges from about 2 to about 10 wt%.

10. The composition of claim 1 for use as a catalyst.