In our research, the state steady Marangoni convection flows of high Prandtl number fluid in the rectangular container configuration (two long vertical walls are one cooled, other heated, two facing short vertical walls and the bottom are insulated) under various gravity vectors (microgravity, $\mu g$ and normal gravity, $1g$) effects have been studied numerically. The numerical model was solved 2-D with Fluent program. The effects of buoyancy on the transport phenomenon are carefully compared.