

## **Development of New Generation of Low Global Warming Potential Compounds: Thermophysical Properties Data**

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In 1980's and 90s the enactment of Montreal Protocol to ban the use of ozone-depleting chemicals led to the discovery and use of new generation of chemicals in various applications including refrigeration, as expansion agents in insulating foams and as solvents. However, in recent times another global environmental crisis is ensuing which has led to more research to find chemicals which has lower global warming potentials (GWP). Some of the chemicals that were developed to substitute the ozone depletion chemicals were found to have unacceptable GWP. Honeywell has spearheaded research activity in developing low GWP chemicals in refrigeration, in foam expansion agent and as aerosol propellants. In the last few years Honeywell researchers have presented thermophysical properties data on 1234yf and 1234ze which are introduced in refrigeration and as foam expansion agents and as propellants in the aerosol industry. Recently another compound named 1233zd is being developed as a foam expansion agent and as a solvent in cleaning applications. This article summarizes the thermophysical properties of 1233zd.