Viscosity and density are thermophysical properties which are crucial to characterize any kind of fluid such as aqueous amines. These blends are becoming more and more relevant for its CO$_2$ capture potential, so it would be useful to know viscosity and density accurately. In this sense, it is possible to find in literature densities and viscosities of these mixtures at atmospheric pressure, but the task becomes more difficult when we try to find values at high pressures which could be interesting to manage in order to characterize these fluids completely. TERMOCAL research group has a long experience in this type of measurements and it has recently involved in the development of two techniques for viscosities at high pressures (up to 140 MPa): a falling body viscometer (stainless steel falling cylinder) and a vibrating wire viscometer (tungsten wire). Therefore, viscosity and density measurements at high pressures (up to 120 MPa) and temperatures between 293.15 and 353.15 K of mixtures MDEA-water (from 10 % to 40 % MDEA mass fraction) will be presented in this work. Density measurements have been performed with an Anton Paar DMA HPM densimeter and it has been used the falling body technique for viscosities at high pressures because of its sturdiness in terms of corrosion.

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