**Injectivity comparison**

Injectivity describes the injection rate achieved under the drainage between the bottomhole injection pressure and the reservoir pressure and is defined as:

in which the imposed bottomhole pressure is less than fracturing pressure. This definition applies to both wastewater and high-rate supercritical CO2 injection. However, unlike wastewater flow, supercritical CO2 flow highly depends on temperature and pressure and follows gas-type flow behavior. The flow rate of a wastewater injection and CO2 injection well can be respectively estimated by: