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## Sealing behavior of caprock during impure CO<sub>2</sub> storage

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The capture  $CO_2$  normally contains impurities. The purification of the  $CO_2$  is costly and surface handling of the impurities is problematic. In this study, we investigate the co-storage of reactive impurities such as H<sub>2</sub>S, NO<sub>2</sub>, and SO<sub>2</sub> with CO<sub>2</sub>. We examine the relevant gas, brine, and rock interactions in the caprock domain and their effect on the sealing condition.









