

## Answer on Question #44399 – Chemistry – Other

### Question

The hydrogen oxalate ion ( $\text{HC}_2\text{O}_4^-$ ) is amphoteric. Write another equation showing how it acts as a base toward water.

Express your answer as a chemical equation. Identify all of the phases in your answer.

### Answer

According to the Brønsted–Lowry theory, an acid is a species able to lose, or "donate" a proton ( $\text{H}^+$ ) while a base is a species with the ability to gain, or "accept," a proton.

The hydrogen oxalate ion can gain a proton acting as a base towards water, while the latter donates proton acting as an acid:

