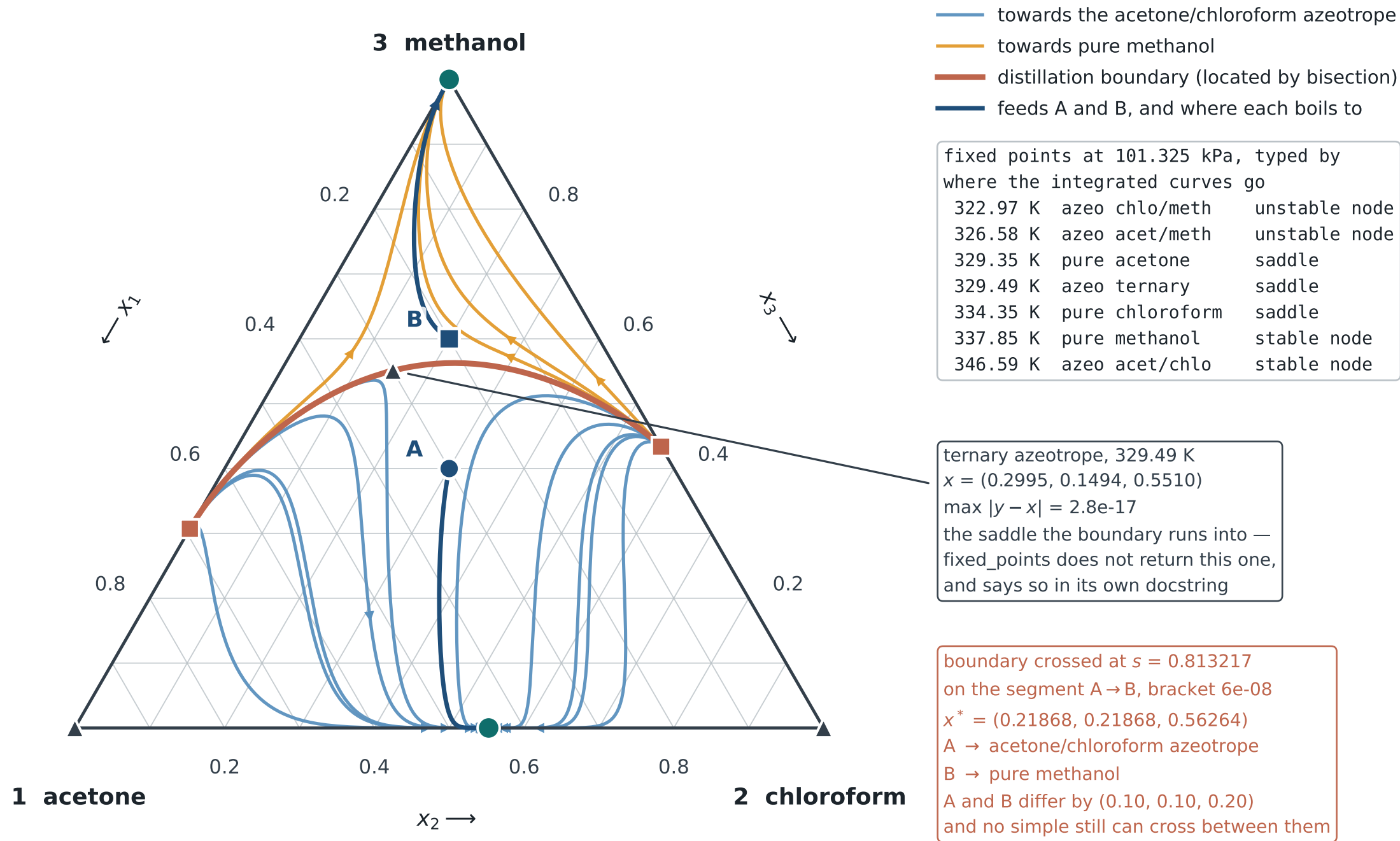


A distillation boundary is a hard constraint: two neighbouring feeds, two different products



ILLUSTRATIVE PARAMETERS: NRTL with $\tau = [[0, -0.90, 0.60], [-0.75, 0, 1.30], [0.45, 1.10, 0]]$ and $\alpha = 0.30$ for all pairs. A teaching set that reproduces the qualitative behaviour of acetone/chloroform/methanol — three binary azeotropes and a ternary saddle — but it is not fitted to measured VLE, so the temperatures above are the model's, not the mixture's. The Antoine constants are vlekit's library values.