What is claimed is:

1. A method of conditioning an organically treated hydrotreating catalyst composition in preparation for a sulfiding treatment, the method comprising:

heating the organically treated hydrotreating catalyst composition in a treatment gas to form an ex-situ conditioned hydrotreating catalyst composition;

wherein

the organically treated hydrotreating catalyst composition comprises:

nickel and molybdenum or cobalt and nickel supported on a porous support, and

at least one organic reagent absorbed in pores of the porous support, and

wherein

the heating decomposes at least a portion of the organic reagent leaving carbonaceous species in pores of the porous support,

wherein

the heating comprises flowing the treatment gas over the organically treated hydrotreating catalyst composition at a temperature of 125 °C to 160 °C for 1 to 2 hours, and

wherein

the treatment gas is nitrogen or a mixture of nitrogen and hydrogen.

2. The method of claim 1, wherein the organic reagent comprises one or more of an organic acid, an acetoacetic acid compound, a polar heterocyclic compound, a polyacidic compound, a nitrogen-containing organic compound, or a carbonate.

3. The method of any of claims 1 - 2, further comprising performing an ex-situ sulfurization of the ex-situ conditioned hydrotreating catalyst composition to form an ex-situ sulfurized hydrotreating catalyst composition.

4. The method of claim 3, wherein performing the ex-situ sulfurization comprises:

contacting the ex-situ conditioned hydrotreating catalyst composition with a sulfur source to form a mixture, and

heating the mixture to form the ex-situ sulfurized hydrotreating catalyst composition.

5. The method of claim 3, wherein performing the ex-situ sulfurization comprises:

contacting the ex-situ conditioned hydrotreating catalyst composition with sulfur and one or more organic compounds to form a mixture; and

heating the mixture to form the ex-situ sulfurized hydrotreating catalyst composition.

6. The method of claim 5, wherein the one or more organic compounds comprise one or more of an olefin and a triglyceride.

7. The method of any of claims 3 - 6, further comprising performing an ex-situ sulfiding of the ex-situ sulfurized hydrotreating catalyst composition.

8. The method of claim 7, wherein the ex-situ sulfiding of the ex-situ sulfurized hydrotreating catalyst composition comprises heating the ex-situ sulfurized hydrotreating catalyst composition under a hydrogen-containing atmosphere.