

Question #59568, Chemistry / Organic Chemistry

I have been trying to balance this redox reaction for the last two hours, but my final answer doesn't look correct. I am trying to balance the oxidation reaction of benzoin to benzil using nitric acid.

The unbalanced equation is :- benzoin + nitric acid ----> benzil + NO₂

My answer is :- Benzoin + 2 nitric acid -----> 2 NO₂ + 2 H₂O + benzil

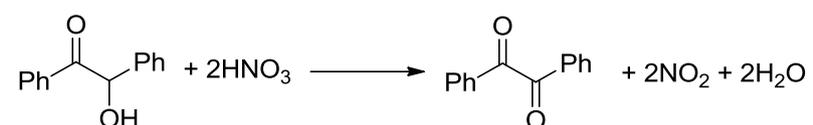
I balanced it using half rxn

does it look correct, please help.

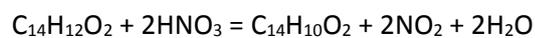
Answer:

Yes, it is absolutely correct.

Here is the equation:



Or in more conventional way:



Or

