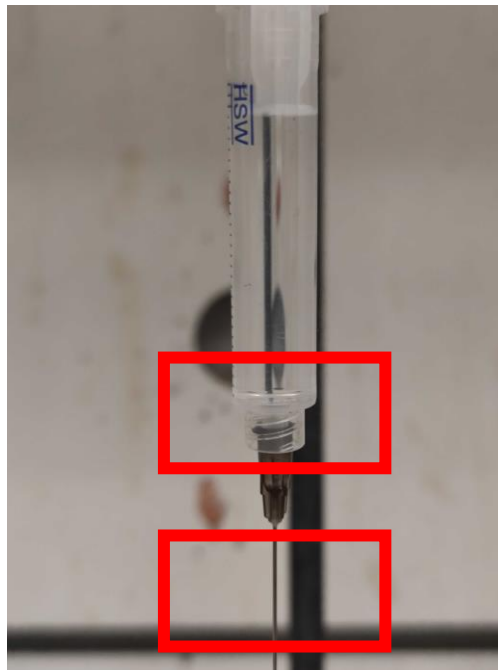


Transfer starting material into a Schlenk flask equipped with a **appropriate** stir bar, then evacuate and refill the flask with nitrogen for three times. PTFE stopper could be used for better air tightness.



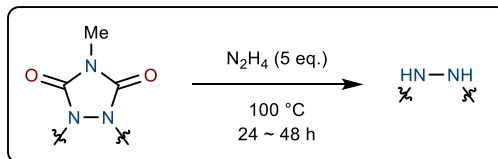
Change the PTFE stopper to a rubber stopper under nitrogen, then add hydrazine carefully:

1. Use syringe with **Luer lock tip**
2. Do not bent the needle



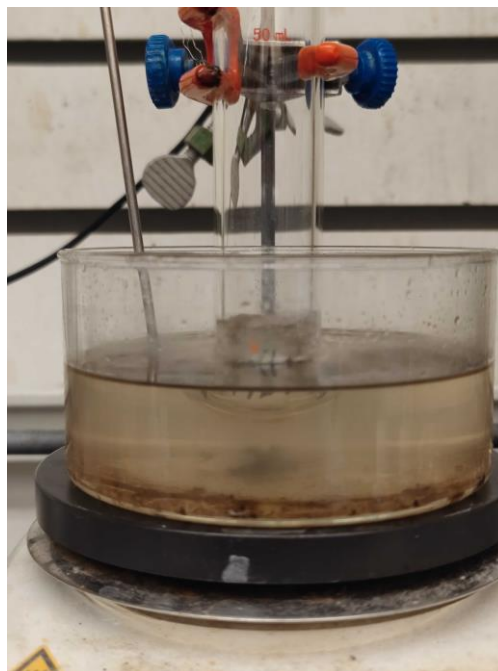
Change back to the PTFE stopper (for better chemical resistance)

Bleach everything that has been in contact with hydrazine

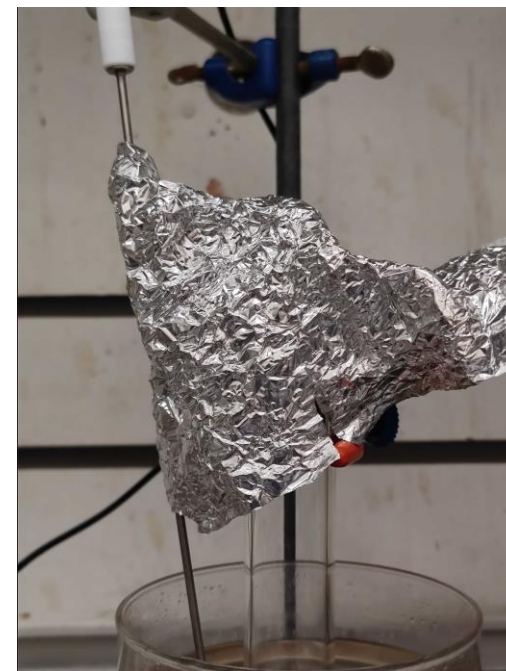


Heat the reaction mixture **behind a blast shield**. Strong stirring is not required but very recommended, especially when the starting material is not very soluble in hydrazine.

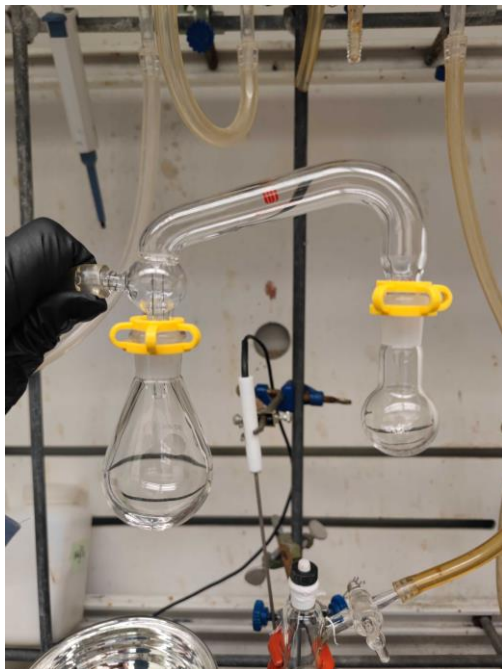
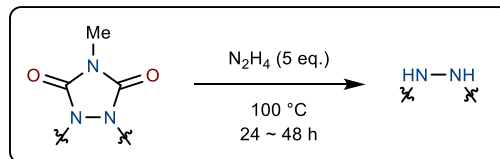
100 degree Celsius is often enough.



The solution level should be higher than the oil level to avoid unnecessary reflux



Close the Schlenk flask to disconnect it from the Schlenk line, then cover the joint area to change the direction of potential vapor flow.



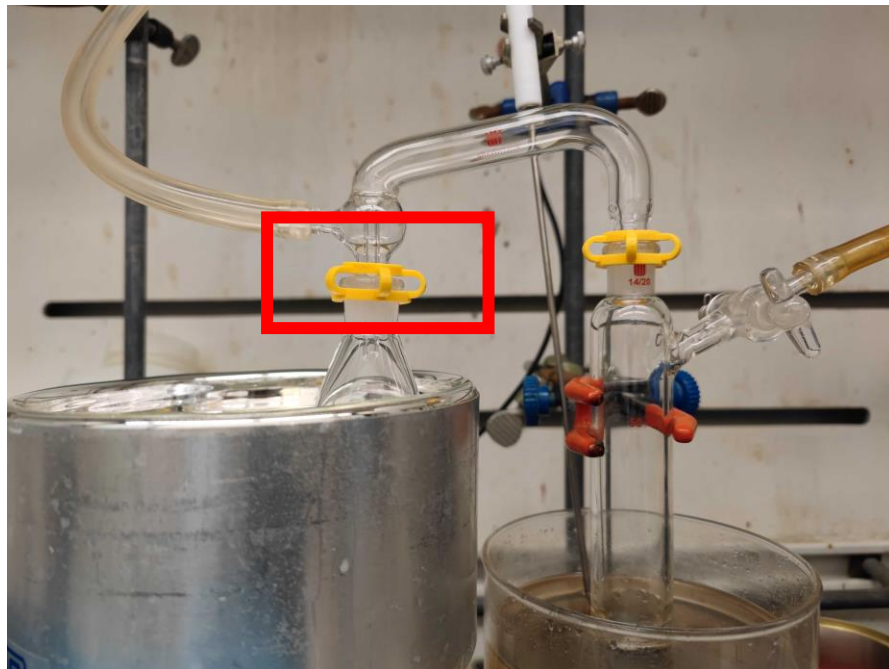
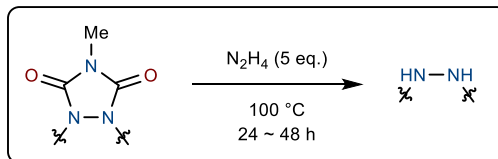
After the reaction is done, the excess hydrazine should be distilled out. The whole distillation set up should be **filled with nitrogen**.

The left is used for collection, the right one is to help the Schlenk operation



Stop heating, wait until the Schlenk flask has been cool down to room temperature, then set up the distillation **under nitrogen**.

I would recommend to disconnect the distillation tube from the helper flask first to reduce the exposure of the product to the air.

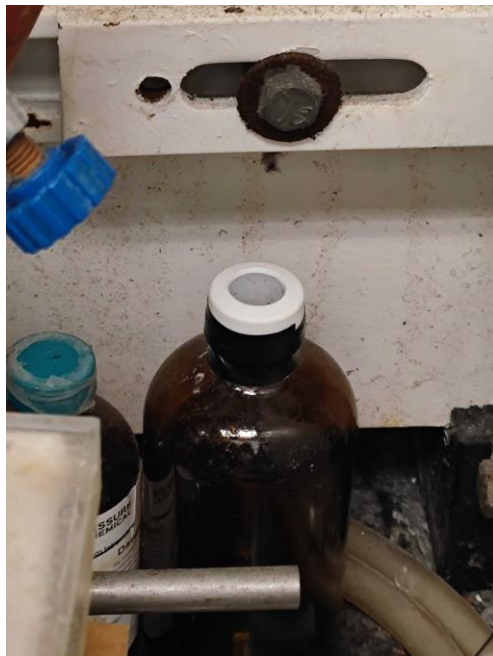
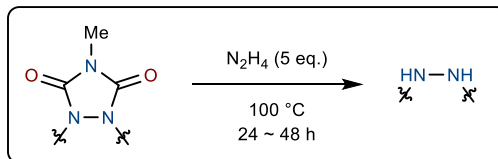


Do vacuum distillation at 50 degree Celsius, the collection flask should be cooled down in a dry ice-acetone bath to prevent hydrazine coming into the liquid nitrogen bath.

Don't heat the tube too much (e.g. with a heat gun) at the beginning! Or hydrazine will condense and clog at the red box area.



Bleach everything that has been in contact with hydrazine



Dilute the distilled hydrazine with ice, then keep the distilled hydrazine sealed and give it to the professionals for disposal asap.



Use the crude product directly for next step. Reagents and solvents used in next step should be degassed before use