

Microfluidic Facility, Harvard Medical School

DILUTION OF PDMS IN TOLUENE

1. Mixture Curing agent/PDMS; 30g PDMS (or more depending on the final thickness, but no more than 1/3 of the beaker capacity 50g) and the corresponding amount of curing agent in the beaker (generally in a 1:10 ratio curing agent: base).



2. Weight the 3 components on the scale (beaker supporter, adaptor and beaker with the blend)



- 3. Balance the mixer with the weight obtained.
- 4. Set the mixer conditions:
 - a. Mixing time= 2 min
 - b. Mixing spin rate= 1200
 - c. Defoaming time= 2 min
 - d. Defoaming spin rate= 800
- 5. Pour and weight toluene solution into a glass beaker.
- 6. Dilute the mixed high viscosity PDMS into toluene solution based on the PDMS/toluene concentration ratio considered.
- 7. Weight again the final mix and the three components on the scale.
- 8. Repeat steps 3 and 4.