

Materials List for:

# Fabrication and Testing of Catalytic Aerogels Prepared Via Rapid Supercritical Extraction

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## Materials

Name	Company	Catalog Number	Comments
Variable micropipettor, 100-1000 $\mu$ L	Manufactured by Eppendorf, purchased from Fisher Scientific <a href="http://www.fishersci.com">www.fishersci.com</a>	S304665	Any 100-1000 $\mu$ L pipettor is suitable.
Variable Pipettor, 2.5-10 mL	Manufactured by Eppendorf, purchased from Fisher Scientific <a href="http://www.fishersci.com">www.fishersci.com</a>	21-379-25	Any variable pipettor is suitable.
Pasteur pipettes	FisherScientific	13-678-6A	
Syringe	Purchased from Fisher Scientific	Z181390 syringe with Z261297 needle	
Digital balance	Ohaus Explorer Pro		Any digital balance is suitable.
Beakers	Purchased from Fisher Scientific		Any glass beaker is suitable.
Graduated Cylinder	Purchased from Fisher Scientific		Any glass graduated cylinder is suitable.
Magnetic Plate/Stirrer	FisherScientific Isotemp	SP88854200P	Any magnetic plate/stirrer is suitable.
Ultrasonic Cleaner	FisherScientific FS6	153356	Any sonicator is suitable.
Mold	Fabricated in House		Fabricate from cold-rolled steel or stainless steel.
Hydraulic Hot Press	Tetrahedron <a href="http://www.tetrahedronassociates.com">www.tetrahedronassociates.com</a>	MTP-14	Any hot press with temperature and force control will work. Needs maximum temperature of ~550 F and maximum force of 24 tons.
UCAT (Union Catalytic Testbed)	Fabricated in House		Described in detail in reference #21: Bruno, B.A., Anderson, A.M., Carroll, M.K., Brockmann, P., Swanton, T., Ramphal, I.A., Palace, T. Benchtop Scale Testing of Aerogel Catalysts. SAE Technical Paper 2016-01-920 (2016).
Bar 97 Gas	Praxair	MS_BAR97ZA-D7	