

Glass-Based Devices to Generate Drops and Emulsions

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Materials

Name	Company	Catalog Number	Comments
2-[methoxy(polyethyleneoxy)6-9propyl]trimethoxysilane.	Gelest	SIM6492.7	
Ceramic tile	Sutter	CTS	
Ethylene glycol	Fisher	BP230	These can be found at other companies like Sigma-Aldrich
Hexane	Sigma- Aldrich	34859	Available in other vendors
ITW Polymers Adhesives Devcon 5 Minute Epoxy Adhesive 25 mL Dev-Tube	Ellsworth adhesives	470740	
Microforge	Narishige	MF 830	
Micropipette puller	Sutter	P97	
Microscope slides	Fisher	12-544-1	Available in other vendors
Needle 20 Gauge, .0255" ID, .0355" OD, 1/2" Long	McMaster	75165A677	
SDS	Sigma-aldrich	428015	Surfactant
Silicone oil	Clearco	PSF-10cSt	The catalog number correspond to the 10cSt viscosity oil. Different viscosity oils can be found at this company
Span 80	Fisher	S0060500G	non-ionic surfactant
Square glass capillary 2mm ID (borosilicate 300 or 600 mm long)	VitroCom	S 102	
Standard Glass Capillaries, 6 in., 2 / 1.12 OD/ID	World Precision instruments	1B200-6	These can be found at other companies like Sutter or Vitrocom
Syringe pump	Chemyx	FUSION 100-X	This model has a good quality/price ratio
Syringes (it will depend on the compatibility with the liquids)	Fisher		Catalog number will depend on the size
Trimethoxy(octyl)silane	Sigma- Aldrich	376221	Available in other vendors
Tubing (it will depend on the compatibility with the liquids)	Scientific commodities	BB3165-PE/5	This reference is for polyethylene micro tubing. The size fits the needle size listed here