

Materials List for:

Experimental Investigation of Secondary Flow Structures Downstream of a Model Type IV Stent Failure in a 180° Curved Artery Test Section

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Materials

Name	Company	Catalog Number	Comments
Acrylic tubes and sheet	McMaster-Carr Supply Company		Inlet and outlet pipes and material of the curved artery test section
Object24 Desktop 3D printer	Stratasys		Desktop rapid prototyping machine. http://www.stratasys.com
VeroWhitePlus Opaque material	Stratasys		Building material for Object24 Desktop 3D printer
Fullcure 705	Stratasys		Non-toxic gel-like photopolymer Support material for Object24 Desktop 3D printer
Ubbelohde viscometer	Cole Parmer	YO-98934-12	Toward measurement of kinematic viscosity of the blood-analog fluid
VELP scientifica - ESP stirrer	VELP Scientifica	F206A0179	Magnetic stirrer
Ohaus Scout Pro SP 601	The Lab Depot	SP4001	Weigh scale
Refractometer	Atago	PAL-RI	Toward measurement of refractive index of blood-analog fluid
Beakers, pipettes, syringes and spatula	Sigma-Aldrich	CLS710110, CLS10031L, CLS71015, CLS71011 Z193216	Toward handling materials required for blood-analog solution preparation
Sodium Iodide	Sigma-Aldrich	383112-2.5KG	Crystalline
Glycerol	Sigma-Aldrich	G5516-1L	Liquid
Deionized Water	-	-	Liquid
Sodium thiosulfate anhydrous	Sigma-Aldrich	72049-250G	Powder
PIV Recording medium	LaVision	Imager Intense 10Hz	PIV Image acquisition CCD camera
PIV Illumination source	New Wave Research	Solo III-15	PIV Laser source, Nd:YAG laser, 532 nm, dual pulse 70 mJ/pulse
PIV Imaging software	LaVision	DaVis 7.2	PIV data acquisition and instrument control
PIV Seeding material	Thermo-scientific	Flouro-Max	Red fluorescent polymer microspheres ($\approx 7 \mu\text{m}$); Dry dyed polystyrene (DVB) fluorescent microspheres emit bright and distinct colors when illuminated by the light of shorter wavelengths than the emission wavelength.