

Materials List for:

Fabrication of Soft Pneumatic Network Actuators with Oblique Chambers

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Materials

| Name | Company | Catalog Number | Comments |
|---|---|---------------------|---|
| Silicone elastomer | Wacker | ELASTOSIL M4601 A/B | Material of the actuators |
| Syringe | Shanghai Kindly Medical Instruments | 10 ml | Used to inject silicone rubber into the hole of the mold for fabricating the connection end |
| Precision scale | Shanghai Hochoice | UTP-313 | Used to weigh the silicone rubber |
| Planetary centrifugal vacuum mixer | THINKY | ARE-310 | Used to mix the silicone rubber and defoam after mixing process |
| Release agent | Smooth-on | Release 200 | Used for ease of demolding |
| Needle | Shanghai Kindly Medical Instruments | | Used for Piercing the bubbles form on the surface |
| Utility blade | M&G Chenguang Stationery | ASS91325 | Used for Scraping off excess silicone rubber along the upper surface of the mold |
| Vacuum oven | Ningbo SI Instrument | DZF-6050 | Used to reduce the cure time of the silicone rubber |
| Male stud push in fit pneumatic fitting | Zhe Jiang BLCH Pneumatic Science & Technology | PC4-01 | Used to connect the tubing and the 3D-printed actuator tubing connector |
| Tubing | SMC | TU0425 | Used for actuating the actuators |
| Vacuum pump | Zhe Jiang BLCH Pneumatic Science & Technology | | Used as the air source |
| Pressure valve | Zhe Jiang BLCH Pneumatic Science & Technology | IR1000-01BG | Used for adjusting the input air pressure |