

Materials List for:

Casting Protocols for the Production of Open Cell Aluminum Foams by the Replication Technique and the Effect on Porosity

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Materials

Name	Company	Catalog Number	Comments
Salt	Hydrosoft	Granular Salt 25 kg 855754	http://www.travisperkins.co.uk/p/hydrosoft-granular-salt-25kg/855754/3893446
Aluminum	William Rowland	Aluminum Ingots 99.87% pure 25 kg drum	http://www.william-rowland.com/products/high-purity-metals#product-id-1
Crucible	Morgan Advance Materials	Syncarb Crucible	http://www.morganmms.com/crucibles-foundry-products/crucibles/syncarb/
Furnace	Elite Thermal Systems	TLCF10/27-3216CP & 2116 O/T	http://www.elitefurnaces.com/eng/products/furnaces/1200%20Top%20Loading%20Furnaces.php
Bar Mold	The University of Sheffield	Custom Made	Stainless Steel 304, 15 cm height, 5 cm inner diameter, 6 cm outer diameter
Band Saw	Clarke	CBS45MD (6" x 4 1/2") 370W 060710025	http://www.machinemart.co.uk/shop/product/details/cbs45md-41-2in-x-6in-metal-cutting-ban
Sandpaper	Wickes	Specialist wet & dry sandpaper 501885	http://www.wickes.co.uk/Specialist-Wet+Dry-Sandpaper-PK4/p/501885
Sieves	Fisher Scientific	Fisherbrand test sieves 200 mm diameter	http://www.fisher.co.uk/product/brand_listing.php/F/Fisherbrand/Sieve
Balance	Precisa	XB 6200C	http://www.precisa.co.uk/precision_balances.php
Boron Nitride	Kennametal	500 ml spray can	http://www.kennametal.com/content/dam/kennametal/kennametal/common/Resources/Catalogs-Literature/Advanced%20Materials%20and%20Wear%20Components/B-13-03401_ceramic_powders_brochure_EN.pdf
Infiltration Mold, Base and Lid	The University of Sheffield	Custom Made	Stainless Steel 304, 15 cm height, 5.1 cm inner diameter, 6 cm outer diameter
Cylindrical Mold	The University of Sheffield	Custom Made	Low carbon steel 1020, 15 cm height, 5 cm inner diameter, 6 cm outer diameter
Graphite Gasket	Gee Graphite	Geegraf Stainless Steel Reinforced Graphite 1 mm thick	http://www.geegraphite.com/steel_reinforced.html

Mallet	Thor Hammer Co. Ltd.	Round Solid Super Plastic Mallet	http://www.thorhammer.com/Mallets/Round/
Wrench	Kennedy Professional	13 mm Ratchet Combination Wrench KEN5822166K	https://www.cromwell.co.uk/KEN5822166K
Nuts	Matlock	M8 Steel hex full nut galvanized	https://www.cromwell.co.uk/CTL6400068J
Washers	Matlock	M8 Form-A steel washer bzp	https://www.cromwell.co.uk/CTL6451208H
SS Nuts	Matlock	M8 A2 st/st hex full nut	https://www.cromwell.co.uk/CTL6423008F
SS Washers	Matlock	M8 A2 st/st Form-A washer	https://www.cromwell.co.uk/CTL6464008H
Stainless Steel Studding	Cromwell	M8 x 1 Mtr A2 Stainless Steel Studding QFT6397080K	https://www.cromwell.co.uk/QFT6397080K
Valves	Edwards	C33205000 SP16K, Nitrile Diaphragm	https://www.edwardsvacuum.com/Products/View.aspx?sku=C33205000
Fitting Cross	Edwards	C10512412 NW16 Cross Piece Aluminum	https://www.edwardsvacuum.com/Products/C10512412/View.aspx
Fitting T	Edwards	C10512411 NW16 T-Piece Aluminum	https://www.edwardsvacuum.com/Products/C10512411/View.aspx
Vacuum Pump	Edwards	A36310940 E2M18 200-230/380-415V, 3-ph, 50 Hz	http://www.edwardsvacuum.com/Products/View.aspx?sku=A36310940
Dial Gauge	Edwards	D35610000 CG16K, 0-1,040 mbar	http://www.edwardsvacuum.com/Products/View.aspx?sku=D35610000
Argon Gas	BOC	Pureshield Argon Gas	http://www.boconline.co.uk/en/products-and-supply/industrial-gases/inert-gases/pureshield-argon/pureshield-argon.html
Stainless Steel Hose	BOC	Stainless Steel Hose	http://www.boconline.co.uk/en/products-and-supply/speciality-equipment/hoses-and-pigtails/index.html
Regulator	BOC	HP 1500 Series Regulator	http://www.boconline.co.uk/en/products-and-supply/speciality-equipment/regulators/single-stage-regulators/hp1500-series/hp1500-series.html
Copper Block	William Rowland	Copper Ingot 25 kg	http://www.william-rowland.com/products/high-purity-metals#product-id-18
Vise	Record	T84-34 H/Duty Eng Vice 4 1/2" Jaws REC5658326K	https://www.cromwell.co.uk/REC5658326K
Beaker	Fisher Scientific	11567402 - Beaker, squat form, with graduations and spout 800 ml	https://webshop.fishersci.com/insight2_uk/getProduct.do;jsessionid=16D5812D71B8CB37B475E94281E2BEA5.ukhigjavapp11?productCode=11567402&resultSetPosition=0
Stirring Hot Plate	Corning	Corning stirring hot plate Model 6798-420d	http://www.corning.com/lifesciences/us_canada/en/technical_resources/product_guid/shp/shp.aspx
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Stir Bar	Fisher Scientific	11848862 - PTFE Stir bar + Ring 25x6 mm	https://webshop.fishersci.com/insight2_uk/getProduct.do;jsessionid=16D5812D71B8CB37B475E94281E2BEA5.ukhigjavapp11?productCode=11848862&resultSetPosition=0
Air dryer	V05	V05 Max Air Turbo Dryer DR-120-GB	http://reviews.boots.com/2111-en_gb/1120627/v05-v05-max-air-turbo-hair-dryer-dr-120-gb-reviews/reviews.htm
Ceramic Sheet	Morgan Advance Materials	Kaowool Blanket 2 mm thick	http://www.morganthermalceramics.com/downloads/datasheets?f[0]=field_type%3A84
Vibrating Table	Peveil Machinery	Pevco Vibrating Table 1.25 m x 0.625 m x 0.6 m	https://peveilmachinery.co.uk/equipment/vibrating-tables