

Materials List for:

Failure of Cleaning Verification in Pharmaceutical Industry Due to Uncleanliness of Stainless Steel Surface

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Materials

Name	Company	Catalog Number	Comments
stainless steel coupons	GlobePharma (New Brunswick, NJ).	SS316-20RA-50cm2	
Clean in place solutions (CIP100 and CIP200)	were obtained from Steris Corporation (Mentor, OH)	1D10BG	Alkaline detergent and acid detergent, respectively
Positive displacement pipettes	Gilson (Middleton, WI).		
HPLC grade water	Millipore Milli-Q Advantage Water Purification System (Darmstadt, Germany) or from Honeywell Burdick & Jackson (Muskegon, Michigan)	7732-18-5	
HPLC grade Methanol	EMD	MX0475-1	
glacial acetic acid	EMD	MAX0073P5	
HPLC grade Acetonitrile	J.T. Baker (Avantor Performance Materials, Center Valley, PA)	75-05-8	
Trifluoroacetic acid	J.T. Baker (Avantor Performance Materials, Center Valley, PA)	75-05-8	
Chromatography column Zorbax Eclipse	XDB-C18, 4.6 x 100 mm, 3.5 µm HPLC column	UNSPSC – 41115709	
Vanquish UHPLC system	Thermo Fisher Scientific, Germering, Germany		
Branson B8510 Ultrasonic cleaner	Branson Ultrasonics (Danbury, CT, USA)	model (8510-D7H)	