



FILLARC Product	Alloy	Similar Powders	Chemical Composition		Chemical Specification				
<i>Stainless Steel Powders</i>					UNS	ASTM	ISO	AMS	DIN
FP 17-4AR	17-4ph	Stainless Steel 17-4PH CL 92PH	Cr 15.0-17.0	Ni 3.0-5.0	17400	A705 S564 A693	15156-3	5604 5643	1.4542
			Cu 3.0-5.0	Mn 1.0 max					
			Si 1.0 max	Mo 1.0 max					
			Nb+Ta 0.15-0.45	C 0.10 max					
			Fe Bal						
FP 15-5AR	15-5ph	Stainless Steel 15-5PH	Cr 14.0-15.5	Ni 3.5-5.5	S15500	A705 S564 A693		5659 5862	1.454
			Cu 2.5-4.5	Mn 1.0 max					
			Si 1.0 max	Mo 1.0 max					
			Nb 0.15-0.45	C 0.07 max					
			Fe Bal						
FP 316L	SS 316L	StainlessSteel 316L CL20ES	C 0.03 max	Si 0.75 max	S31673	F745 F138	5832-1		1.4401
			Mn 2.0 max	P 0.025 max					1.4404
			S 0.01 max	Cr 17.5-18.0					
			Ni 12.5-13	Mo 2.25-2.50					
			Cu 0.50 max	Fe Bal					

**Disclaimer:**The technical information is provided for information only and not for design purposes. Powder Alloy Corporation makes no warranty of any kind with respect to the subject matter accuracy.

FILLARC Product	Alloy	Similar Powders	Chemical Composition		Chemical Specification				
<i>Tool Steel Powders</i>					UNS	ASTM	ISO	AMS	DIN
FP M300E	18Ni300	CL50WS Tool Steel 1.2709	C 0.03 max	Mn 0.15	K93120			6514	1.2709
			Si 0.10 max	Ni 17.0-19.0					
			Mo 4.50-5.20	Co 8.50-10.0					
			Ti 0.80-1.20	P 0.010 max					
			S 0.010	Fe Bal					

**Disclaimer:**The technical information is provided for information only and not for design purposes. Powder Alloy Corporation makes no warranty of any kind with respect to the subject matter accuracy.

FILLARC Product	Alloy	Similar Powders	Chemical Composition		Chemical Specification				
<i>Titanium Alloy Powders</i>					UNS	ASTM	ISO	AMS	DIN
FP 6Al4Vsp5	Ti6-4	Titanium Ti64 CL40Ti	Al 5.5-6.5	V 3.5-4.5	R56400	F1472 B348 gr 5	5832-3	5954 4911 4928	3.7164
			N 0.03 max	C 0.08 max					
			H2 0.0125 max	Fe 0.25 max					
			O 0.20 max	Res Each 0.1					
			Res Total 0.4	Ti Bal					
FP 6Al4Vsp23	Ti6-4 ELI	Titanium Ti64ELI CL41Ti-ELI	Al 5.5-6.5	V 3.5-4.5	R56401	F136 B348 gr 23 F3001	5832-3	4956	3.7164
			N 0.03 max	C 0.08 max					
			H2 0.0125 max	Fe 0.25 max					
			O 0.13 max	Res Each 0.1					
			Res Total 0.4	Ti Bal					



FILLARC Product	Alloy	Similar Powders	Chemical Composition		Chemical Specification				
Nickel & Cobalt Based Powders					UNS	ASTM	ISO	AMS	DIN
FP 750	CoCrMo	CoCr28Mo6	C 0.16 max	Mn 1.0 max	R31538	F1537	5832-4 CL111		
			Si 1.0 max	Cr 27.0-30.0		F799	5832-12		
			Ni 0.50 max	Mo 5.0-7.0		F75			
			Fe 0.75 max	S 0.010 max					
			P 0.020 max	Al 0.10 max					
			Ti 0.10 max	W 0.20 max					
			B 0.010 max	Co Bal					
FP 605	Haynes®25® L605		Cr 20.5-23	Fe 17-20	N06002	B 435		5536	2.4665
			Mo 8-10	Mn 1 max		B 572		5754	
			Co .5-2.5	Si 1 max				5798	
			W 0.2-1	Ti 0.15 max					
			C 0.10 max	Ni Bal					
© Haynes International									
FP 8188	Haynes®188®		Cr 20.0-24.0	C 0.05-0.015	R3018			5608	2.4683
			Ni 20.0-24.0	Fe 3.0 max				5801	
			Co Bal	Mn 1.25 max				5772	
			W 13.0-16.0	Si 0.2-0.5					
			La 0.02-0.12	P 0.02 max					
			B 0.015 max	S 0.015 max					
© Haynes International									
FP 8814	Haynes® 214®		Cr 15-17	Al 4.1-5.0	N07214				
			Fe 2.0-2.8	Mn 0.50 max					
			B 0.004 max	Mo 0.50 max					
			C 0.05 max	S 0.015					
			Nb 0.15	Si 0.20					
			Co 2.0 max	Ti 0.50					
			W 0.50	Ni Bal					
			© Haynes International						
FP 8830	Haynes®230®		C 0.05-0.15	Fe 3.00 max	N06230	B435		5878	2.4733
			Mn 0.30-1.00	Al 0.20-0.50				5891	
			Si 0.25-0.75	W 13-15					
			P 0.03 max	Co 5.00 max					
			S 0.015 max	Mo 1.0-3.0					
			Cr 20-24	Ni Bal					
			La 0.005-0.05						
© Haynes International									
Haynes®282®	Haynes®282®	Propriety	Propriety			Propriety	Propriety		
© Haynes International									
FP 8863	Nimonic® C263		C 0.04-0.08	Co 19.0-21.0	N107263			5872	2.465
			Cr 19.0-21.0	Mo 5.6-6.1					
			Ti 1.9-2.4	Al 0.6 max					
			Mn 0.60 max	Si 0.040 max					
			Cu 0.20 max	Fe 0.7 max					
			Ni Bal						
© Special Metals									



**FILLARC ALLOY**  
WIRE & WELDING

STAINLESS AND NICKLE ALLOY POWDERS  
SPECIFICATION GUIDE

FILLARC Product	Alloy	Similar Powders	Chemical Composition		Chemical Specification				
<i>Nickel &amp; Cobalt Based Alloy Powder - Continued</i>					UNS	ASTM	ISO	AMS	DIN
FP X	Hastelloy® X®		Cr 20.5-23	Fe 17-20	N06002	B 435 B 572		5536 5754 5798	2.4665
			Mo 8-10	Mn 1 max					
			Co .5-2.5	Si 1 max					
			W 0.2-1	P 0.04 max					
			Al 0.5 max	S 0.03 max					
			Ti 0.15 max	Cu 0.5 max					
			B 0.01 max	Ni Bal					
			C 0.10 max						
© Haynes International									
FP 718	Inconel® 718	CL100NB	Cr 17-21	Mn 0.35 max	7718	B537 B670		5832 5596	2.4668
			Mo 2.8-3.3	Si 0.35 max					
			Ti 0.65-1.15	P 0.015 max					
			Al 0.2-0.8	S 0.015 max					
			Co 1 max	B 0.006 max					
			C 0.08 max	Cu 0.3 max					
			Ni 50-55	Fe Bal					
			Cb+Ta 4.75-5.50						
© Special Metals									
FP 625	Inconel® 625	CL101NB	Cr 20-23	Ti 0.4 max	6625	446 Gr1 443 Gr1		5599 5666	2.4856
			Mo 8-10	C 0.1 max					
			Co 1 max	Fe 0.5 max					
			Cb+Ta 3.15-4.15	Mn 0.5 max					
			Al 0.4 max	Si 0.5 max					
			S 0.15 max	P 0.015 max					
			Ni Bal						
			© Special Metals						

FILLARC Product	Alloy	Similar Powders	Chemical Composition		Chemical Specification				
<i>Copper Alloy Powders</i>					UNS	ASTM	ISO	AMS	DIN
FP GR84	GRCop 84		Cr 6.0-7.0	Fe 50ppm					
			Nb 5.2-6.2	Cu Bal					
FP GR42	GR Cop 42		Cr 3.10-3.40	Fe 50ppm					
			Nb 2.7-3.0	Cu Bal					
FP Cu150	C18150		Cr 0.50-1.50	Zr 0.02-0.20	C18150				
			Cu Bal						



## STAINLESS AND NICKLE ALLOY POWDERS SPECIFICATION GUIDE

FILLARC Product	Alloy	Similar Powders	Chemical Composition		Chemical Specification				
<b>Aluminum Alloy Powders</b>					<b>UNS</b>	<b>ASTM</b>	<b>ISO</b>	<b>AMS</b>	<b>DIN</b>
FP 716	AlSi10Mg	Al Alloy AlSi10Mg CL31Al	Si 9.0-11.0 Fe 0.55 max Cu 0.05 max Mn 0.45 max Mg 0.2-0.45 Ni 0.05 max	Zn 0.10 max Pb 0.05 max Sn 0.05 max Ti 0.15 max Al Bal	A13600	A03600			3.2381
FP 901M	AlSi12	Al Alloy AlSi12 CL30AL	Al Oxide 0.8 max Cu 0.30 Fe 0.80 Mg 0.15	Mn 0.15 Si 11-13 Zn 0.20 Al Bal	A49047				3.2852

Disclaimer: The technical information is provided for information only and not for design purposes. Powder Alloy Corporation makes no warranty of any kind with respect to the subject matter accuracy.

