

Exaton 47S

47S is a highly basic welding flux for electrosag strip surfacing. It gives excellent slag removal and bead appearance also for niobium-alloyed strip electrodes. Flux 47S is used together with strip electrodes of steel types chromium, chromium-nickel and chromium-nickel-molybdenum with or without niobium. The high basicity of flux 47S makes it especially suitable for duplex, super-duplex and fully austenitic stainless steel surfacings.

Specifications

Classifications	EN ISO 14174 : ES A FB 2B
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Welding Current	1700 A (Using 60x0.5 strip)
Slag Type	Fluoride basic CaF ₂ -Al ₂ O ₃
Density	nom: 1.0 Kg/l
Basicity Index	nom: 4.0

Conditions : Volts 25 V , kg Flux / kg Wire DC+ 0.5 kg , Amps 1250 A , Travel speed 9 m/h

Classifications

Wire	AWS/EN	AWS - As Welded
Exaton 19.12.3.L	A5.9:EQ316L/ 14343-A:B 19 12 3 L	-
Exaton 19.13.4.L	A5.9:EQ317L/ 14343-A:B 19 13 4 L	-
Exaton 19.9.L	A5.9:EQ308L/ 14343-A:B 19 9 L	-
Exaton 19.9.LNb	A5.9:EQ347/ 14343-A:B 19 9 Nb	-
Exaton 21.11.LNb	A5.9:EQ?309LNb?/ 14343-A:B 22 11 L Nb	A5.39: ESCLAD1-EQ309L(mod)/347
Exaton 21.13.3.L	A5.9:EQ(309LMo)/ 14343-A:B 21 13 3 L	-
Exaton 22.11.L	A5.9:EQ(309L)/ 14343-A:B 22 11 L	A5.39: ESCLAD1-EQ309L(Mod)/308L
Exaton 22.8.3.L	A5.9:EQ2209/ 14343-A:B 22 9 3 N L	-
Exaton 24.13.LNb	A5.9:EQ?309LNb?/ 14343-A:B 23 12 Nb	-
Exaton 25.22.2.LMn	14343-A:B 25 22 2 N L	-

Approvals

Combined with Wire

*Selected production units only. Please contact ESAB for more information. Visit esab.com to download specific flux/wire combination fact sheets for more details.

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
Exaton 19.12.3.L 1st layer with "22.11.L"									
<=0.03	-	-	-	-	12	18.2	2.3	-	-
Exaton 19.13.4.L 1st layer with "21.13.3.L"									
<=0.03	-	-	-	-	13.2	18.5	3.4	-	-
Exaton 19.13.4.L 1st layer with "22.11.L"									
<=0.03	-	-	-	-	13	18.5	3.2	-	-
Exaton 19.9.L 1st layer with "22.11.L"									
<=0.030	-	-	-	-	10	19.5	-	-	-
Exaton 19.9.LNb (Layer 1 with "21.11.L" & Layer 2 with "19.9.LNb")									
0.01	1.2	0.4	0.009	0.014	10.5	19.2	0.1	0.06	0.03
Exaton 21.11.LNb (1-layer)									
0.02	1.3	0.5	0.001	0.01	10.1	19.3	0.1	0.03	0.05
Exaton 21.13.3.L (1 layer)									
0.02	1.1	0.4	0.002	0.013	12.5	18.7	2.7	0.06	0.03
Exaton 22.11.L									
<=0.06	-	-	-	-	9.7	18.5	-	-	-
Exaton 22.8.3.L Layer 1 with "22.8.3.L" & 2 layers with "22.8.3.L"									

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Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<=0.02	-	-	-	-	8.5	22.5	3.1	-	0.16
Exaton 22.8.3.L Layer 1 with "22.11.L" & 2 layers with "22.8.3.L"									
<=0.02	-	-	-	-	8.5	22.5	3.0	-	0.15
Exaton 24.13.LNb (1 layer)									
0.03	1.5	0.4	0.002	0.011	10.7	20.8	0.2	0.04	0.04
Exaton 25.22.2.LMn (2 layers)									
0.02	3.5	0.4	0.002	0.016	22.0	24.6	2.0	-	0.14

Typical Weld Metal Analysis %

Nb	Ferrite FN	FN WRC-92	Nb+Ta
Exaton 19.12.3.L 1st layer with "22.11.L"			
-	6	-	-
Exaton 19.13.4.L 1st layer with "21.13.3.L"			
-	6	-	-
Exaton 19.13.4.L 1st layer with "22.11.L"			
-	6	-	-
Exaton 19.9.L 1st layer with "22.11.L"			
-	8	-	-
Exaton 19.9.LNb (Layer 1 with "21.11.L" & Layer 2 with "19.9.LNb")			
-	-	8	0.3
Exaton 21.11.LNb (1-layer)			
0.4	-	5	-
Exaton 21.13.3.L (1 layer)			
-	-	8	-
Exaton 22.11.L			
-	6	-	-
Exaton 22.8.3.L Layer 1 with "22.8.3.L" & 2 layers with "22.8.3.L"			
-	45	-	-
Exaton 22.8.3.L Layer 1 with "22.11.L" & 2 layers with "22.8.3.L"			
-	45	-	-
Exaton 24.13.LNb (1 layer)			
-	-	13	0.6
Exaton 25.22.2.LMn (2 layers)			
-	-	0	-

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
Exaton 19.12.3.L									
<=0.020	1.8	0.4	<=0.020	<=0.020	13	18.5	2.9	<=0.3	-
Exaton 19.13.4.L									
<=0.02	1.5	0.4	<=0.020	<=0.020	14	19	3.6	<=0.3	-
Exaton 19.9.L									
<=0.015	1.8	0.35	<=0.015	<=0.015	10	20	<=0.3	<=0.1	-
Exaton 19.9.LNb									
<=0.02	1.8	0.4	<=0.02	<=0.02	10.5	20	<=0.3	<=0.3	-
Exaton 21.11.LNb									
<=0.015	1.8	0.2	<=0.020	<=0.020	11	21	<=0.3	<=0.3	-

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Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
Exaton 21.13.3.L									
<=0.015	1.8	0.2	<=0.015	<=0.020	13.5	20.5	2.9	<=0.3	-
Exaton 22.11.L									
<=0.015	1.8	0.2	<=0.020	<=0.020	11.5	21	<=0.3	<=0.1	-
Exaton 22.8.3.L									
<=0.020	1.6	0.5	<=0.015	<=0.020	9	23	3.1	-	0.15
Exaton 24.13.LNb									
<=0.02	2	0.3	<=0.020	<=0.020	12.5	24	<=0.3	<=0.3	-
Exaton 25.22.2.LMn									
<=0.020	4.5	<=0.2	<=0.015	<=0.015	22.0	25.0	2.1	-	0.13

Typical Wire Composition %

Nb	Ferrite FN	FN WRC-92
Exaton 19.12.3.L		
-	8	-
Exaton 19.13.4.L		
-	7	-
Exaton 19.9.L		
-	12	-
Exaton 19.9.LNb		
0.5	-	11
Exaton 21.11.LNb		
0.55	-	14
Exaton 21.13.3.L		
-	-	13
Exaton 22.11.L		
-	13	-
Exaton 22.8.3.L		
-	50	-
Exaton 24.13.LNb		
0.75	-	22