

Exaton 49S

49S is a basic, agglomerated flux for electroslag strip surfacing. This flux is particularly intended for high-speed welding. In spite of high welding speed, flux 49S gives excellent slag removal and bead appearance, also for niobium-alloyed strip electrodes. It is used together with strip electrodes of the chromium, chromium-nickel and chromium-nickel-molybdenum steel types with or without niobium.

Specifications

Classifications	EN ISO 14174 : ES A FB 2B
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Welding Current	2200 A (Using 60x0.5 mm strip)
Slag Type	Fluoride basic CaF ₂ -Al ₂ O ₃
Density	nom: 1.0 Kg/l
Basicity Index	nom: 4.4

Classifications

Wire	AWS/EN
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
Exaton 22.11.L	A5.9:EQ(309L)/ 14343-A:B 22 11 L
Exaton 24.13.L	A5.9:EQ309L/ 14343-A:B 23 12 L
Exaton 24.13.LNb	A5.9:EQ?309LNb?/ 14343-A:B 23 12 Nb

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 Layer 1 with "24.13.L"									
<=0.03	-	-	-	-	12.0	17.7	2.2	-	-
Exaton 19.13.4.L Layer 1 with "24.13.L"									
<=0.03	-	-	-	-	13.0	18.5	2.7	-	-
Exaton 19.9.L Layer 1 with "24.13.L"									
<=0.03	-	-	-	-	10	19.2	-	-	-
Exaton 19.9.LNb (Layer 1 with "24.13.LNb" & Layer 2 with "19.9.LNb")									
0.02	1.4	0.3	-	-	10.5	19.6	0.1	-	0.03
Exaton 19.9.LNb									
-	-	-	-	-	-	-	-	-	-
Exaton 19.9.LNb (Layer 1 with "24.13.L" & Layer 2 with "19.9.LNb")									
0.02	1.3	0.3	-	-	10.6	19.5	0.1	-	0.03
Exaton 21.11.LNb									
-	-	-	-	-	-	-	-	-	-
Exaton 21.11.LNb (1 layer)									
0.02	1.4	0.4	-	-	9.7	18.9	0.1	-	0.05
Exaton 24.13.L									
<=0.07	-	-	-	-	10.2	19	-	-	-
Exaton 24.13.LNb									
<=0.06	-	-	-	-	9.7	18.5	-	-	-

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Typical Weld Metal Analysis %	
Nb	Ferrite FN
Exaton 19.12.3.L Layer 1 with "24.13.L"	
-	6
Exaton 19.13.4.L Layer 1 with "24.13.L"	
-	6
Exaton 19.9.L Layer 1 with "24.13.L"	
-	8
Exaton 19.9.LNb (Layer 1 with "24.13.LNb" & Layer 2 with "19.9.LNb")	
0.4	-
Exaton 19.9.LNb (Layer 1 with "24.13.L" & Layer 2 with "19.9.LNb")	
0.3	-
Exaton 21.11.LNb (1 layer)	
0.5	-
Exaton 24.13.L	
-	6
Exaton 24.13.LNb	
-	5

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	-
Exaton 22.11.L									
<=0.015	1.8	0.2	<=0.020	<=0.020	11.5	21	<=0.3	<=0.1	-
Exaton 24.13.L									
<=0.015	1.8	0.35	<=0.015	<=0.015	13	23.5	<=0.3	<=0.1	-
Exaton 24.13.LNb									
<=0.02	2	0.3	<=0.020	<=0.020	12.5	24	<=0.3	<=0.3	-

Typical Wire Composition %	
Nb	Ferrite FN
Exaton 19.12.3.L	
-	8
Exaton 19.13.4.L	
-	7
Exaton 19.9.L	
-	12
Exaton 19.9.LNb	
0.5	11

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Typical Wire Composition %	
Nb	Ferrite FN
Exaton 21.11.LNb	
0.55	14
Exaton 22.11.L	
-	13
Exaton 24.13.L	
-	15
Exaton 24.13.LNb	
0.75	22