

Exaton 49S

Exaton 49S is a basic, agglomerated flux for electrosag strip surfacing. This flux is particularly intended for high-speed welding. In spite of high welding speed, flux Exaton 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. Exaton 49S gives the following typical chemical properties of all-weld metal for the strip electrode below. Exaton 24.13.LNb is used for corrosion resistant weld surfacing of components in the chemical, petrochemical, nuclear industry. Typical components are pressure vessels, heat exchangers, shafts, industrial piping etc.

Specifications	
Classifications	EN ISO 14174 : ES A FB 2B
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	SFA/AWS - EN ISO
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									

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Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<=0.06	-	-	-	-	9.7	18.5	-	-	-

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	

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Typical Wire Composition %	
Nb	Ferrite FN
-	12
Exaton 19.9.LNb	
0.5	11
Exaton 21.11.LNb	
0.55	14
Exaton 22.11.L	
-	13
Exaton 24.13.L	
-	15
Exaton 24.13.LNb	
0.75	22