

Classifications

EN ISO 14174

S A AF 2 DC

Characteristics and typical fields of application

Marathon 805 is an agglomerated aluminate-fluoride-basic flux for submerged arc welding with stabilized and non-stabilized stainless steel wires. It is primarily designed for welding (and cladding) with high-alloyed austenitic and duplex stainless SAW wires, but also standard CrNi, CrNiMo alloys. The flux provides chromium support to compensate chromium loss when welding. The weld metal for this reason typically has the same or somewhat higher chromium content than the wire itself. Especially suitable for applications where high impact toughness values and high pitting corrosion resistance are required. The flux provides very good welding properties and self releasing slag. Thin fluid slag provides nice bead appearance. Former product name was "Avesta Flux 805".

Flux properties

Polarity	DC
Basicity index (Boniszewski)	2.0 (wt%) ; 2.2 (mol)
Grain size (EN ISO 14174)	3 – 16 (0.3 bis 1.6 mm)
Apparent density	1.0 kg/dm ³
Redrying	300°C bis 350°C (2 bis 10 Std)

Composition of sub-arc welding flux

	Al ₂ O ₃ +MnO	CaF ₂
wt. %	35	50

Typical wires to combine				
Name	EN ISO	Class	AWS / SFA	Class
Thermanit 16/05 Mo (Avesta 248 SV)	14343-A	S 16 5 1	A5.9 / -5.9	-
Thermanit JE-308L (Avesta 308L/MVR)	14343-A	S 19 9 L	A5.9 / -5.9	ER308L
Thermanit GE-316L (Avesta 316L/SKR)	14343-A	S 19 12 3 L	A5.9 / -5.9	ER316L
Thermanit 317L (Avesta 317L/SNR)	14343-A	S 19 13 4 L	A5.9 / -5.9	ER317L
Thermanit H-347 (Avesta 347/MVNB)	14343-A	S 19 9 Nb	A5.9 / -5.9	ER347
Thermanit A-318 (Avesta 318/SKNb)	14343-A	S 19 12 3 Nb	A5.9 / -5.9	ER318
Thermanit 20/25 Cu (Avesta 904L)	14343-A	S 20 25 5 Cu L	A5.9 / -5.9	ER385
Thermanit 23/07 (Avesta 2304)	14343-A	S 23 7 N L	A5.9 / -5.9	ER2307
Thermanit 22/09 (Avesta 2205)	14343-A	S 22 9 3 N L	A5.9 / -5.9	ER2209
Thermanit 25/09 CuT (Avesta 2507/P100 ^{CuW})	14343-A	S 25 9 4 N L	A5.9 / -5.9	ER2594
Thermanit 309L (Avesta 309L)	14343-A	S 23 12 L	A5.9 / -5.9	ER309L
Thermanit 309L Mo (Avesta P5)	14343-A	S 23 12 2 L	A5.9 / -5.9	ER309L Mo (mod.)
Thermanit 308 Mo (Thermanit 20/10)	14343-A	S 20 10 3	A5.9 / -5.9	ER308Mo (mod.)
Thermanit 30/10 (Avesta P7)	14343-A	S 29 9	A5.9 / -5.9	ER312
Thermanit 308 H (Avesta 308H)	14343-A	S 19 9 H	A5.9 / -5.9	ER308H
Thermanit 21/10 N (Avesta 253 MA)	14343-A	S 21 10 N	A5.9 / -5.9	-

Packaging

Type	Weight
DRY SYSTEM	25 kg