



Product Data Sheet

S 'Submerged arc welding'

OK Flux 10.77

Prepared by M Gustafsson	Qualified by Tero Tolonen	Approved by Martin Gehring	Reg no EN006041	Cancelling EN004361	Reg date 2013-04-04	Page 1 (2)
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REASON FOR ISSUE

EN 760 replaced by EN ISO 14174, Approval comment added.

GENERAL

Agglomerated aluminate-basic flux for Submerged Arc Welding especially for production of mild and high-strength line pipe steels (mainly spiral pipe production). Shallow reinforcement, low transition angles, smooth surface finish even at high welding speeds. Designed for single and multi wire procedures. Suitable for DC and AC welding.

CLASSIFICATIONS Flux

EN ISO 14174 S A AB 1 67 AC H5

APPROVALS

CE EN 13479

APPROVAL COMMENT

All others: See Flux-Wire combinations

SLAG TYPE

Aluminate-basic

CHEMICAL COMPOSITION

	Flux (%)	
	Nom	
Al ₂ O ₃ +MnO	35	
CaF ₂	15	
CaO+MgO	20	
SiO ₂ +TiO ₂	25	

Other properties:

Alloy Transfer	Slightly Silicon and moderately Manganese alloying
Basicity (Boniszewski)	nom: 1.3
Bulk Density	nom: 1.2 kg/dm ³
Grain Size	0.2-1.6 mm (10x65 mesh)
Hydrogen	max 5 ml H/100g weld metal (Redried flux)

WELDING POLARITY

DC+, AC

FLUX CONSUMPTION

Arc Voltage	(kg Flux / kg Wire/Strip)	
	DC+	AC
26	0.7	0.6
30	1.0	0.9
34	1.3	1.2
38	1.6	1.4

Current (A):	580
Travel Speed (cm/min):	55
Dimension (mm):	Ø 4.0



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REDRYING

When handled and stored in suitable ways: Usually not necessary.

For hydrogen sensitive applications or when flux has picked up moisture: 300 +/- 25°C (570 +/- 45°F), 2 - 4 h

METALLURGICAL BEHAVIOR

Single Wire, Ø 4.0 mm, DC+, 30 V, 60 cm/min

