

# LEXAL F500

## SAW Fluxes

*Stainless and Heat resistant steels*



LEXAL F500 is a special agglomerated flux for welding austenitic stainless steels including stabilised compositions. LEXAL F500 is neutral and it is used for welding both single wire and multiwire. Suitable for welding thin plates at high travel speeds. Excellent slag detachability even at high interpass temperatures. Damp flux should be re-dried at 300-350°C.

Grain size according to EN-ISO 14174: 2-16.



### Classification

EN ISO 14174: S A FB 2

### Approvals

	BV	DNV	GL	LRS	RINA	TÜV
AS 308L						●
AS 309L		309L	4332			●
AS 309LMo					F 309LMo	
AS 316L		316L	4404			●
AS 347						●
LEXAL S 22 9 3 N	(UP)	(*)	(4462)	(31803)	(F 2209 M)	

### Flux Main Components

CaO + CaF <sub>2</sub> + MgO	54 %
Al <sub>2</sub> O <sub>3</sub>	37 %
SiO <sub>2</sub>	7 %

Boniszewski Basicity 2.2

### Chemical analysis (Typical values in %)

		C	Mn	Si	Cr	Ni	Mo	Nb	Cu	N
All weld metal	AS 308L	0.02	1.5	0.5	18	9	-	-	≤ 0.35	-
All weld metal	AS 309L	0.02	1.5	0.5	22	13	-	-	-	-
All weld metal	AS 309LMo	0.02	1.5	0.5	20	14	2.5	-	-	-
All weld metal	AS 316L	0.02	1.5	0.5	18	10	2.5	-	-	-
All weld metal	AS 347	0.07	1.5	0.5	18	9	-	1	≤ 0.35	-
All weld metal	LEXAL S 22 9 3 N	0.03	1.5	0.5	22	8.5	3	-	-	0.18

### All-weld metal Mechanical Properties

	Heat Treatment	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation A5 (%)
AS 308L	As Welded	≥ 350	≥ 500	≥ 35
AS 309L	As Welded	≥ 400	≥ 550	≥ 30
AS 309LMo	As Welded	≥ 370	≥ 550	≥ 25
AS 316L	As Welded	≥ 350	≥ 520	≥ 30
AS 347	As Welded	≥ 500	≥ 570	≥ 30
LEXAL S 22 9 3 N	As Welded	≥ 600	≥ 700	≥ 30

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### All-weld metal Mechanical Properties - CV

	Heat Treatment	Impact Energy (J)	
		+20 °C	-60 °C
AS 308L	As Welded	≥ 75	
AS 309L	As Welded	≥ 70	≥ 70
AS 309LMo	As Welded	≥ 65	
AS 316L	As Welded	≥ 75	
AS 347	As Welded		≥ 70
LEXAL S 22 9 3 N	As Welded	≥ 50	

### Typical applications

	Materials
AS 309LMo	First layer on Carbon-Managanese steels and low alloy steels for 316L overlay
AS 316L	ASME: ASTM A351 Grades CF3M, CF3MA EN: X2CrNiMo18-10 (1.4404), X2CrNiMo18-12 (1.4435), X5CrNiMo18-10 (1.4401)
AS 347	ASME: ASTM A336 Grades F321, F347 EN: X10CrNiTi18-9 (1.4541), X12CrNiTi18-9 (1.4870), X10CrNiNb18-9 (1.4550), X5CrNiNb (1.4543)
AS 308L	ASME: AISI 304 - 304L - 302 EN: X5CrNi18-8 (1.4301), X2CrNi18-8 (1.4300)
LEXAL S 22 9 3 N	ASME: A182 Grade F51, UNS S31803 - S31500 - S31200 - S32304 EN: X2CrNiMoN22-5-8 (1.4462)

#### Redrying

300-350°Cx2-4h

#### Current Conditions

AC; DC+

### Packaging data

Packaging Type	PE
Weight (kg)	25
-	●