

Chemical composition for API 5L PSL1 pipe
Wall thickness ≤ 25.0 mm (0.984 in)



Chemical composition								
Steel Grade (Steel Name)	Wall Thickness ≤ 25.0 mm (0.984 in)							
	Mass fraction, based upon heat and product analyses							
	%							
	C	Mn	P		S	V	Nb	Ti
max	max	min.	max	max	max	max	max	max
Seamless pipe								
L175 or A25	0.21	0.60	—	0.030	0.030	—	—	—
L175P or A25P	0.21	0.60	0.045	0.080	0.030	—	—	—
L210 or A	0.22	0.90	—	0.030	0.030	—	—	—
L245 or B	0.28	1.20	—	0.030	0.030	c,d	c,d	d
L290 or X42	0.28	1.30	—	0.030	0.030	d	d	d
L320 or X46	0.28	1.40	—	0.030	0.030	d	d	d
L360 or X52	0.28	1.40	—	0.030	0.030	d	d	d
L390 or X56	0.28	1.40	—	0.030	0.030	d	d	d
L415 or X60	0.28	1.40	—	0.030	0.030	f	f	f
L450 or X65	0.28	1.40	—	0.030	0.030	f	f	f
L485 or X70	0.28	1.40	—	0.030	0.030	f	f	f
Welded (ERW, LSAW, SSAW) pipe								
L175 or A25	0.21	0.6	—	0.030	0.030	—	—	—
L175P or A25P	0.21	0.6	0.045	0.080	0.030	—	—	—
L210 or A	0.22	0.9	—	0.030	0.030	—	—	—
L245 or B	0.26	1.2	—	0.030	0.030	c,d	c,d	d
L290 or X42	0.26	1.3	—	0.030	0.030	d	d	d
L320 or X46	0.26	1.4	—	0.030	0.030	d	d	d
L360 or X52	0.26	1.4	—	0.030	0.030	d	d	d
L390 or X56	0.26	1.4	—	0.030	0.030	d	d	d
L415 or X56	0.26	1.4	—	0.030	0.030	f	f	f
L450 or X65	0.26	1.45	—	0.030	0.030	f	f	f
L485 or X70	0.26	1.65	—	0.030	0.030	f	f	f

- a. Cu ≤ 0,50 %; Ni ≤ 0,50 %; Cr ≤ 0,50 % and Mo ≤ 0.15%
- b. For each reduce of 0.01% Carbon Max, an increase of 0.05% of maximum Mn is permitted, up to a maximum of 1.65 for grade ≥ B or L245, but ≤ X52 or L360; Up to max 1.75% for grades above L360 or X52, but below L485 or X70; And up to 2.00% max for grade X70 or L485.
- c. Unless otherwise agreed, Nb + V ≤ 0.06%.
- d. Nb + V + Ti ≤ 0.15%.
- e. Unless otherwise agreed.
- f. Unless otherwise agreed, Nb + V + Ti ≤ 0.15%.
- g. B shall be not added in on purpose, and maximum B is 0.001%.