

TEST REPORT

No. 11 0006040 18-01 (EN)

1st copy

Customer

IEQSA Industrias Electro Químicas S. A.
Av. Elmer Faucett no. 1920
LIMA 100
PERÚ

Date of order:

30.05.2018

Receipt of sample:

03.07.2018

Sample identification:

385/18

Samples

The customer delivered several zinc sheet samples as listed in the following table. The samples were marked at the MPA NRW.

MPA No.	Amount	Dimensions mm
1-3	3	300 x 300 x 0.7
A-C	3	68 x 68 x 2

Order

The following tests are to be done on the delivered sheet samples according to DIN EN 988:1996-08:

- Tensile test according to DIN EN ISO 6892-1 B on each 0.7 mm sheet sample parallel and transverse to the rolling direction,
- Creep test according to DIN EN 988:1996 on each 0.7 mm sheet sample,
- Chemical composition analysis on the samples thickness 2 mm.

This test report consists of 3 page(s).

The results of the tests are only valid for the sample(s) given in the report. In case of doubt or litigation the German version of this test report is decisive. Copying of the report is only allowed of an unchanged and complete version. To give a modified or abridged version is only allowed with permission of the MPA NRW.

The original of this document was issued in German language. In case of doubt only the German version is valid.

Tests and test results

The following chemical composition was determined by spectroscopic analysis on the sheets, thickness 2 mm.

sample no.	Pb %	Cd %	Sn %	Fe %	Cu %	Ti %	Al %	Ni %
A	0,001	<0,001	<0,001	0,001	0,13	0,09	0,006	<0,001
B	0,001	<0,001	<0,001	0,001	0,13	0,10	0,005	<0,001
C	0,001	<0,001	<0,001	0,001	0,13	0,09	0,006	<0,001
desired value ¹⁾	--	--	--	--	min. 0,08 max. 1,0	min. 0,06 max. 0,2	max. 0,015	--

1) according to DIN EN 988: Zinc and zinc alloys - Specification for rolled flat products for building; German version EN 988:1996

From the 0.7 mm sheets a test piece parallel to the rolling direction was made according to DIN 50150 and tested in a tensile test according to DIN EN ISO 6892-1, system B.

Sample no.	0,2%-yield-strength $R_{p0,2}$ MPa	Tensile strength R_m MPa	elongation A_{50mm} %
1-L	134	150	82,0
2-L	132	179	71,0
3-L	132	180	75,5
desired value ¹⁾	min. 100	min. 150	min. 35

1) according to DIN EN 988: Zinc and zinc alloys - Specification for rolled flat products for building; German version EN 988:1996

On demand of the customer a test piece transverse to the rolling direction was made additionally and tested in a tensile test according to DIN EN ISO 6892-1, system B.

Sample no.	0,2%-yield-strength $R_{p0,2}$ MPa	Tensile strength R_m MPa	elongation A_{50mm} %
1-Q	158	233	62,0
2-Q	163	237	66,0
3-Q	163	236	65,0

The creep test was done according to DIN EN 988 chapter 6.3.3 with the following result.

sample no.	elongation in creep test %
1	0,09
2	0,06
3	0,07
desired value ¹⁾	max. 0,1

1) according to DIN EN 988: Zinc and zinc alloys - Specification for rolled flat products for building; German version EN 988:1996

Assessment

The sheet samples fulfill the requirements in the tested values according to DIN EN 988:1996.

Dortmund, 26-09-2018

by order



Dipl.-Ing. S. Hönig
Head of test laboratory

