

DECLARATION OF AMMONIA RESISTANCE CONFORMITY

(SOLEK INTERNAL TEST – AMMONIA RESISTANCE)

We, Solen Kablo as manufacturer declare that our H1Z2Z2-K DC SOLAR CABLES manufactured in accordance with EN 50618 and IEC 62930 conforms to the essential requirements of the ammonia resistance tests

Test Report No : KF.18-160525-01

Test Method & Standard: SOLEK Internal Test based on Test Instruction numbered KT.02.03.16
Tensile Strength test (after immersed in NH₄OH solution at +20±5°C for 7 days /168 h.)

Test Results:

Variaton on Tensile Strength: After immersion NH₄OH solution at +20±5°C for 7 days (168 h)

Conform: Variaton on tensile strength of the exposed samples must remain within ±30% of the unexposed (reference) samples to be considered acceptable.

pH Value		Tensile Strength (N/mm2)		
Initial	After 7 Days of Immersion	Before Immersion	After 7 Days of Immersion	Final Variation
11	11,5	12	10	16 %

Test Result: PASS

Document No: 006/11.06.2025

This declaration is issued under the sole responsibility of the Solen Kablo.

Habibe ÇALIŞKAN

Q.A. Manager

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1. TEST REFERENCES

Test Name : AMMONIA RESISTANCE TEST
Test Reference Standard : SOLEN Internal Test based on Test Instruction numbered KT.02.03.16
Test Date : 09.05.2025 – 16.05.2025

2. SPECIMEN DETAILS

Specimen Under Test : H1Z2Z2-K EBXL 1x6 mm2 RED
Rated Voltage (U₀/U) : 1500 V DC

3. TEST DETAILS

Purpose:

This test is performed to evaluate the corrosion resistance of solar cable sheaths by exposing them to an ammonia-based environment.

Scope:

The test covers the assessment of the mechanical integrity of cable sheath materials after immersion in a 5% (±1) ammonium hydroxide (NH₄OH) solution for a total of 7 days, under controlled temperature conditions.

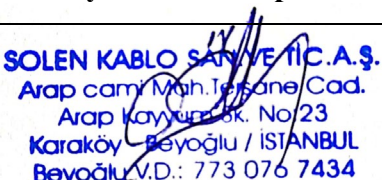
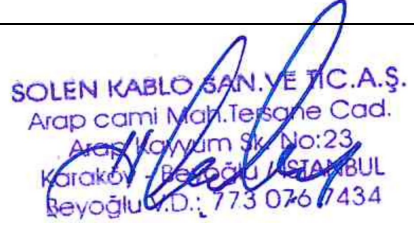
Method Overview:

- A total of 10 samples are prepared, with 5 immersed in the NH₄OH solution and 5 kept in ambient conditions for reference.
- Daily checks are performed for temperature, pH level, and solution level.
- At the end of the test period, tensile strength tests are conducted on all samples, and the results are compared.
- The tensile strength of the exposed samples must remain within ±30% of the unexposed (reference) samples to be considered acceptable.

4. TEST RESULTS

Test Specimen	pH Value of Solution (1 st Day)	pH Value of Solution (7 th Day)	Tensile Strength Without Immersion (N/mm ²)	Tensile Strength After Immersion (N/mm ²)	Variaton on Tensile Strength (%)
H1Z2Z2-K EBXL 1x6 mm2 RED	11	11,5	12	10	16

4.1 Test Result: PASSED

Quality Control Responsible	Quality Assurance Manager
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