

Report No. 70.400.19.309.01-00/04

Dated 2019-07-23



China

Technical Report

Applicant: LONGi Solar Technology Co., Ltd
Shangji Road NO.8989 Xi'an
PEOPLE'S REPUBLIC OF CHINA

Attn: Wu Jing

Manufacturer: LONGi Solar Technology Co., Ltd

Test subject: Model: LR6-72HBD-xxxM

Test specification: **Extractable Heavy Metals Test**
Using the Toxicity Characteristic Leaching Procedure, test Method EPA 1311:1992, analysis was performed by ICP-OES.

Test result: Refer to the data listed in following pages

Conclusion: Extractable Heavy Metals Test Pass

Remarks:

1. The result relates only to the items tested
2. Samples were tested as received

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Disclaimer Measurement Uncertainty:

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Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

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1. Order
 - 1.1 Date of Purchase Order,
2019-05-30
 - 1.2 Customer's Reference
Nil
 - 1.3 Receipt Date of Test Sample
2019-05-30
 - 1.4 Date of Testing
2019-05-30~2019-07-17
 - 1.5 Document submitted
Nil
 - 1.6 Location of Testing
TÜV PS SHA

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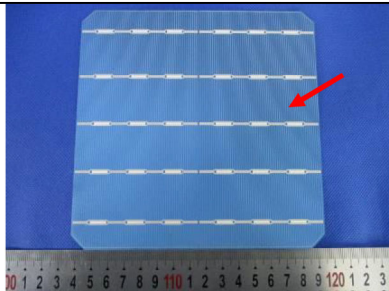

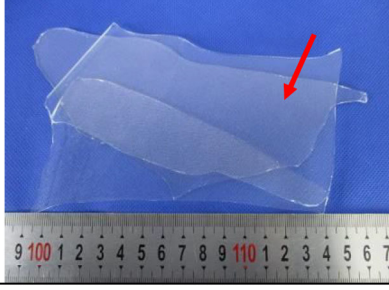
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2. Description of the tested subject

No.	Tested sample	Picture
001	Cell	
002	White plastic film	
003	Transparent glass	

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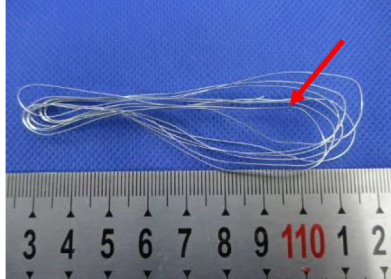
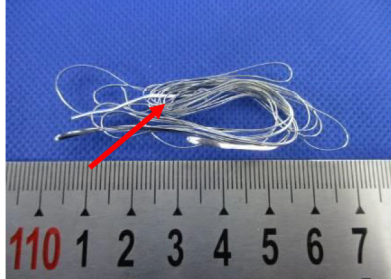
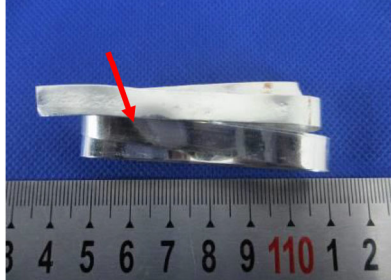
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No.	Tested sample	Picture
004	Silvery metal wire	 A photograph of a tangled piece of silvery metal wire. A red arrow points to a specific part of the wire. Below the wire is a ruler showing markings from 3 to 12, with the number 110 highlighted in red.
005	Silvery metal wire	 A photograph of a tangled piece of silvery metal wire. A red arrow points to a specific part of the wire. Below the wire is a ruler showing markings from 110 to 7, with the number 110 highlighted in red.
006	Silvery metal	 A photograph of a small, rectangular piece of silvery metal. A red arrow points to a specific part of the metal. Below the metal is a ruler showing markings from 3 to 12, with the number 110 highlighted in red.

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3. Test Results

3.1 Extractable Heavy Metals Test

Using the Toxicity Characteristic Leaching Procedure, test Method EPA 1311:1992, analysis was performed by ICP-OES.

Test item	MDL (mg/L)	Result				Regulatory Level (mg/L)
		001	002	003	004	
Arsenic (As)	0.2	<0.2	<0.2	<0.2	<0.2	5.0
Barium(Ba)	0.2	2.7	<0.2	<0.2	<0.2	100.0
Cadmium(Cd)	0.2	<0.2	<0.2	<0.2	<0.2	1.0
Chromium(Cr)	0.2	<0.2	<0.2	<0.2	<0.2	5.0
Lead (Pb)	0.2	<0.2	<0.2	<0.2	<0.2	5.0
Mercury(Hg)	0.2	<0.2	<0.2	<0.2	<0.2	0.2
Selenium(Se)	0.2	<0.2	<0.2	<0.2	<0.2	1.0
Silver(Ag)	0.2	<0.2	<0.2	<0.2	<0.2	5.0

Remark:

1. MDL = Method Detection Limit
2. ND = Not detected (<MDL)
3. "mg/L" denotes "milligram per liter"
4. Maximum Concentration quote from 40 CFR 261.24 - Toxicity characteristic table 1: Maximum Concentration of Contaminants for the Toxicity Characteristic

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Mercury(Hg)	0.2	<0.2	<0.2	0.2
Selenium(Se)	0.2	<0.2	<0.2	1.0
Silver(Ag)	0.2	<0.2	<0.2	5.0

Remark:

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Engineer:


Ms. Peng Qiping

Checked by:


Ms. Qi Nannan

- End of Report -

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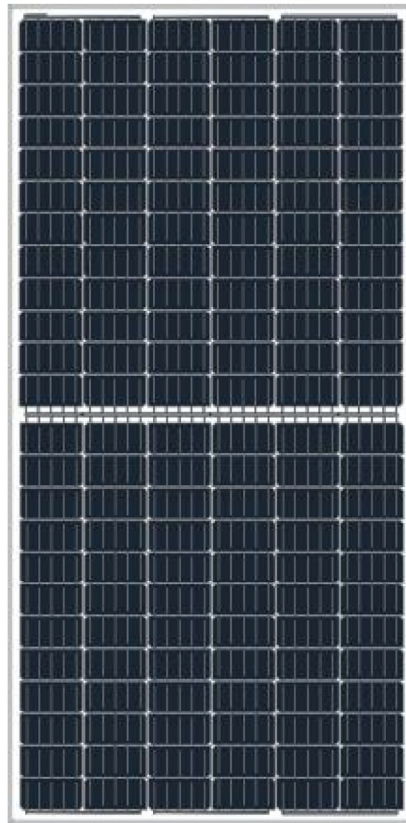
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Appendix I: photo of whole product

LR6-72HBD-xxxM



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TEST REPORT

Date of Report: 9/17/2021

Project ID / Job Number: 234170604

Client: JinkoSolar (U.S.) Inc

Address: 595 Market Street, Suite 2200
San Francisco CA 94105 USA

Model Identification: **G5b & PV-JK09Lxy**

Item Description: Solar Panel & Junction Box

Number of Samples Submitted: 1

Additional Information: None

Test Parameters: **Toxicity Characteristic Leaching Procedure (TCLP)**

Date Received: 3/11/2021

Testing Period: 8/17/2021 – 9/17/2021

Delivery Condition: *Apparent Good*

Testing Location: TÜV Rheinland of North America
2709 SE Otis Corley Dr, Suite 11
Bentonville, AR 72712 USA

Other Aspects: N/A

Test Report Compiled by:



William Tyree / Senior Chemist

Test Report Reviewed by:



Terry Yost / Laboratory Manager

Test result is drawn according to the kind and extent of tests performed. This test report is not permitted to be duplicated in extracts without permission of the test facility. This test report does not entitle any safety mark on this or similar products.

Test Parameters:

Test Specification	Test Result
1. Toxicity Characteristic Leaching Procedure (TCLP)	Pass

METHOD SUMMARY (EPA Method 1311)

A weight representative aliquot of the test article was leached with an acetic acid / sodium hydroxide solution at a 1:20 mix of sample to solvent. The leachate mixture was sealed in an extraction vessel and tumbled for 18 hours to simulate an extended leaching time in the ground. It was then filtered and the solution was analyzed for inorganic contaminants listed in the table below (see Test Results).

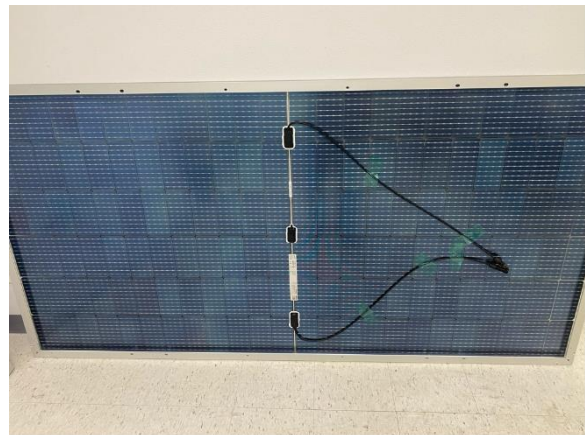
Test Results:

Test method: The sample was analyzed by Inductively Coupled Plasma – Mass Spectrometer (ICP-MS) with reference to EPA 6020a.

EPA Waste Number	Regulatory Metal	Regulatory Limit (mg/L)	Result (mg/L)
D004	Arsenic	5.000	<5
D005	Barium	100.000	<100
D006	Cadmium	1.000	<1
D007	Chromium	5.000	<5
D008	Lead	5.000	<5
D009	Mercury	0.200	<0.2
D010	Selenium	1.000	<1
D011	Silver	5.000	<5

Abbreviation: mg/L denotes milligram per liter (ppm)

Sample Photos:





Test Article(s)

-- END --