

TEST REPORT

DEKRA Testing and Certification (Shanghai) Ltd
5F, 217# Jiangchangsan Road, Shibei Hi-Tech
Park, Shanghai, P.R.C. (200436)
Tel.: +86 21 6056 7666
Fax: +86 21 6056 7555

Contact
Mr. Leaf Liu
Tel: 021-60567527
E-Mail: Leaf.Liu@dekra.com
Report Issue Date: 2023.07.17
Page 1 of 13

Test Report No. : 6159893.50QS
Project no. : 6159893

Client : Chint New Energy Technology Co., Ltd.
No.1 Jisheng Road, Jianshan New Zone, Haining City, Zhejiang

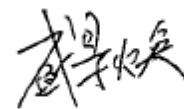
Date sample received : 2023.04.26/ 2023.07.12
Product : Photovoltaic (PV) Modules
Type(s) : CHSM66M(DG)/F-BH
Test Requested : TCLP
Test Method : Please refer to next page(s).
Result : Please refer to next page(s).
Testing Period : 2023.04.26 - 2023.05.18
2023.07.12 - 2023.07.14

Signed for and on behalf of

DEKRA Testing and Certification (Shanghai) Ltd



Liu YuPing (刘宇平)
Project Manager



Sheng Jinghuan(盛景焕)
Test Engineer

Picture of the product



TEST RESULTS

Parameter	Method	Units	MDL	Limit	Testing result
Arsenic (As)	USEPA 200.8	mg/L	0.05	≤5	ND
Barium (Ba)	USEPA 200.8	mg/L	0.01	≤100	0.545
Cadmium (Cd)	USEPA 200.8	mg/L	0.001	≤1	0.001
Chromium (Cr)	USEPA 200.8	mg/L	0.01	≤5	ND
Lead (Pb)	USEPA 200.8	mg/L	0.01	≤5	ND
Selenium (Se)	USEPA 200.8	mg/L	0.05	≤1	ND
Silver (Ag)	USEPA 200.8	mg/L	0.01	≤5	ND
Mercury (Hg)	USEPA 7473	mg/L	0.005	≤0.2	ND
Benzene	USEPA 8260D	mg/L	0.0005	≤0.5	ND
Carbon tetrachloride	USEPA 8260D	mg/L	0.0005	≤0.5	ND
Chlorobenzene	USEPA 8260D	mg/L	0.0005	≤100	ND
Chloroform	USEPA 8260D	mg/L	0.0005	≤6	ND
1,4-Dichlorobenzene	USEPA 8260D	mg/L	0.0005	≤7.5	ND
1,2-Dichloroethane	USEPA 8260D	mg/L	0.0005	≤0.5	ND
1,1-Dichloroethene	USEPA 8260D	mg/L	0.0005	≤0.7	ND
2-butanone(MEK)	USEPA 8260D	mg/L	0.02	≤200	ND
Tetrachloroethene	USEPA 8260D	mg/L	0.0005	≤0.7	ND
Trichloroethene	USEPA 8260D	mg/L	0.0005	≤0.5	ND
Vinyl chloride	USEPA 8260D	mg/L	0.0005	≤0.2	ND
Methylphenol ¹	USEPA 8270E	mg/L	0.001	≤200	ND
2-Methylphenol	USEPA 8270E	mg/L	0.0005	-	ND
3&4-Methylphenol	USEPA 8270E	mg/L	0.0005	-	ND
2,4-Dinitrotoluene	USEPA 8270E	mg/L	0.0005	≤0.13	ND
Hexachlorobenzene	USEPA 8270E	mg/L	0.0005	≤0.13	ND
Hexachlorobutadiene	USEPA 8270E	mg/L	0.0005	≤0.5	ND
Hexachloroethane	USEPA 8270E	mg/L	0.0005	≤3	ND
Nitrobenzene	USEPA 8270E	mg/L	0.0005	≤2	ND
Pentachlorophenol	USEPA 8270E	mg/L	0.0025	≤100	ND
Pyridine	USEPA 8270E	mg/L	0.002	≤5.0	ND
2,4,5-Trichlorophenol	USEPA 8270E	mg/L	0.0005	≤400	ND
2,4,6-Trichlorophenol	USEPA 8270E	mg/L	0.0005	≤2	ND
Chlordane(Total) ²	USEPA 8270E	mg/L	0.001	≤0.03	ND

Endrin	USEPA 8270E	mg/L	0.0005	≤0.02	ND
γ-BHC	USEPA 8270E	mg/L	0.0005	≤0.4	ND
Toxaphene	USEPA 8270E	mg/L	0.05	≤0.5	ND
γ-Chlordane	USEPA 8270E	mg/L	0.0005	-	ND
α-Chlordane	USEPA 8270E	mg/L	0.0005	-	ND
Methoxychlor	USEPA 8270E	mg/L	0.0005	≤10	ND
Heptachlor	USEPA 8270E	mg/L	0.0005	≤0.008	ND
2,4-D*	USEPA 8151A	mg/L	0.0005	≤10	ND
2,4,5-TP (Silvex, Fenopop)	USEPA 8151A	mg/L	0.0005	≤1	ND

Note:

Remark:

- 1) Methylphenol are the sum of 2-Methylphenol and 3&4-Methylphenol.
- 2) Chlordane(Total) are the sum of α -Chlordane and γ -Chlordane.
- 3) Preparative method:USEPA1311-1992(Toxicity Characteristic Leaching Procedure).
- 4) The Limits comes from CFR(code of federal regulations) title 40 part 261.24.
- 5) "-"The parameter is not tested or not applicable.
- 6) This test was carried out by external laboratory assessed as competent

QC Report
Method Blank (MB)

Parameter	Unit	MDL	MB	Control Range
Determination of trace elements in waters and wastes by inductively coupled plasma-mass spectrometry Method: USEPA 200.8-1994				
Arsenic (As)	mg/L	0.050	< 0.050	< 0.050
Barium (Ba)	mg/L	0.010	< 0.010	< 0.010
Cadmium (Cd)	mg/L	0.001	< 0.010	< 0.010
Chromium (Cr)	mg/L	0.010	< 0.010	< 0.010
Lead (Pb)	mg/L	0.010	< 0.010	< 0.010
Selenium (Se)	mg/L	0.050	< 0.050	< 0.050
Silver (Ag)	mg/L	0.010	< 0.010	< 0.010
Metals-Hg Method: USEPA 7473-2007				
Mercury (Hg)	mg/L	0.005	< 0.005	< 0.005
VOCs Method: USEPA 8260D-2018				
Benzene	mg/L	0.0005	< 0.0005	< 0.0005
Carbon tetrachloride	mg/L	0.0005	< 0.0005	< 0.0005
Chlorobenzene	mg/L	0.0005	< 0.0005	< 0.0005
Chloroform	mg/L	0.0005	< 0.0005	< 0.0005
1,4-Dichlorobenzene	mg/L	0.0005	< 0.0005	< 0.0005
1,2-Dichloroethane	mg/L	0.0005	< 0.0005	< 0.0005
1,1-Dichloroethene	mg/L	0.0005	< 0.0005	< 0.0005
2-butanone(MEK)	mg/L	0.02	< 0.020	< 0.020
Tetrachloroethene	mg/L	0.0005	< 0.0005	< 0.0005
Trichloroethene	mg/L	0.0005	< 0.0005	< 0.0005
Vinyl chloride	mg/L	0.0005	< 0.0005	< 0.0005
SVOCs Method: USEPA 8270E-2018				
2-Methylphenol	mg/L	0.0005	< 0.0005	< 0.0005
3&4-Methylphenol	mg/L	0.0005	< 0.0005	< 0.0005
2,4-Dinitrotoluene	mg/L	0.0005	< 0.0005	< 0.0005
Hexachlorobenzene	mg/L	0.0005	< 0.0005	< 0.0005
Hexachlorobutadiene	mg/L	0.0005	< 0.0005	< 0.0005
Hexachloroethane	mg/L	0.0005	< 0.0005	< 0.0005
Nitrobenzene	mg/L	0.0005	< 0.0005	< 0.0005
Pentachlorophenol	mg/L	0.0025	< 0.0025	< 0.0025
Pyridine	mg/L	0.002	< 0.002	< 0.002
2,4,5-Trichlorophenol	mg/L	0.0005	< 0.0005	< 0.0005

2,4,6-Trichlorophenol	mg/L	0.0005	< 0.0005	< 0.0005
SVOCs Method: USEPA 8270E-2018				
Endrin	mg/L	0.0005	< 0.0005	< 0.0005
γ-BHC	mg/L	0.0005	< 0.0005	< 0.0005
Toxaphene	mg/L	0.05	< 0.050	< 0.050
γ-Chlordane	mg/L	0.0005	< 0.0005	< 0.0005
α-Chlordane	mg/L	0.0005	< 0.0005	< 0.0005
Methoxychlor	mg/L	0.0005	< 0.0005	< 0.0005
Heptachlor	mg/L	0.0005	< 0.0005	< 0.0005
Acid Herbicides in Water by GC-MS Method: USEPA 8151A-1996				
2,4-D*	mg/L	0.0005	< 0.0005	< 0.0005
2,4,5-TP (Silvex, Fenopop)	mg/L	0.0005	< 0.0005	< 0.0005

The evaluation of Method Blanks (MB): All results of MB on this batch are lower than method detection limits, which meet the acceptance criteria of lab quality control.

Laboratory Control Sample(LCS)

Parameter	Unit	MDL	Result	Ref.Value	Recovery	Control range	
					%	Lower	Upper
Determination of trace elements in waters and wastes by inductively coupled plasma-mass spectrometry Method: USEPA 200.8-1994							
Arsenic (As)	mg/L	0.05	0.197	0.2	98.7	80%	120%
Barium (Ba)	mg/L	0.01	0.2	0.2	100	80%	120%
Cadmium (Cd)	mg/L	0.001	0.212	0.2	106	80%	120%
Chromium (Cr)	mg/L	0.01	0.207	0.2	103	80%	120%
Lead (Pb)	mg/L	0.01	0.213	0.2	106	80%	120%
Selenium (Se)	mg/L	0.05	0.22	0.2	110	80%	120%
Silver (Ag)	mg/L	0.01	0.222	0.2	111	80%	120%
Metals-Hg Method: USEPA 7473-2007							
Mercury (Hg)	mg/L	0.005	< 0.005	0.001	105	80%	120%
VOCs Method: USEPA 8260D-2018							
Benzene	mg/L	0.0005	0.0194	0.02	96.8	70%	130%
Carbon tetrachloride	mg/L	0.0005	0.0214	0.02	107	70%	130%
Chlorobenzene	mg/L	0.0005	0.0202	0.02	101	70%	130%
Chloroform	mg/L	0.0005	0.0199	0.02	99.6	70%	130%
1,4-Dichlorobenzene	mg/L	0.0005	0.0199	0.02	99.4	70%	130%
1,2-Dichloroethane	mg/L	0.0005	0.0207	0.02	103	70%	130%
1,1-Dichloroethene	mg/L	0.0005	0.0184	0.02	92	70%	130%
2-butanone(MEK)	mg/L	0.02	0.02	0.02	102	70%	130%
Tetrachloroethene	mg/L	0.0005	0.0207	0.02	104	70%	130%
Trichloroethene	mg/L	0.0005	0.0195	0.02	97.3	70%	130%
Vinyl chloride	mg/L	0.0005	0.0195	0.02	97.6	70%	130%
SVOCs Method: USEPA 8270E-2018							
2-Methylphenol	mg/L	0.0005	0.004	0.005	79	30%	144%
3&4-Methylphenol	mg/L	0.0005	0.0071	0.01	71.3	30%	141%
2,4-Dinitrotoluene	mg/L	0.0005	0.0046	0.005	93	46%	140%
Hexachlorobenzene	mg/L	0.0005	0.0047	0.005	94	61%	127%
Hexachlorobutadiene	mg/L	0.0005	0.0041	0.005	81.4	10%	111%
Hexachloroethane	mg/L	0.0005	0.0044	0.005	87.8	38%	131%
Nitrobenzene	mg/L	0.0005	0.0042	0.005	84.8	25%	133%
Pentachlorophenol	mg/L	0.0025	0.0148	0.025	59.2	35%	130%
Pyridine	mg/L	0.002	0.004	0.005	83	10%	200%
2,4,5-Trichlorophenol	mg/L	0.0005	0.0046	0.005	93	40%	140%
2,4,6-Trichlorophenol	mg/L	0.0005	0.0046	0.005	92.6	40%	140%
Acid Herbicides in Water by GC-MS Method: USEPA 8151A-1996							
2,4-D*	mg/L	0.0005	0.0008	0.001	82	70%	130%
2,4,5-TP (Silvex, Fenopop)	mg/L	0.0005	0.001	0.001	95	70%	130%

LCS Recovery%= Result*100/ Reference Value.

The evaluation of recoveries for Laboratory Control Samples (LCS): All recoveries of LCS on this batch are in the controlled range, which meet the acceptance criteria of lab quality control.

Laboratory Duplicate(DUP)

Parameter	Unit	MDL	Sample result	Duplicate result	RD%	RD Control Range%	Sur Control Range
Determination of trace elements in waters and wastes by inductively coupled plasma-mass spectrometry							
Method: USEPA 200.8-1994							
Arsenic (As)	mg/L	0.05	< 0.050	< 0.050	0	≤20	-
Barium (Ba)	mg/L	0.01	0.538	0.552	1.2	≤20	-
Cadmium (Cd)	mg/L	0.001	0.001	0.001	10.5	≤20	-
Chromium (Cr)	mg/L	0.01	< 0.010	< 0.010	0	≤20	-
Lead (Pb)	mg/L	0.01	20.5	20.3	0.7	≤20	-
Selenium (Se)	mg/L	0.05	< 0.050	< 0.050	0	≤20	-
Silver (Ag)	mg/L	0.01	< 0.010	< 0.010	0	≤20	-
Metals-Hg Method: USEPA 7473-2007							
Mercury (Hg)	mg/L	0.005	< 0.005	< 0.005	0	≤10	-
VOCs Method: USEPA 8260D-2018							
Benzene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
Carbon tetrachloride	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
Chlorobenzene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
Chloroform	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
1,4-Dichlorobenzene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
1,2-Dichloroethane	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
1,1-Dichloroethene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
2-butanone(MEK)	mg/L	0.02	< 0.020	< 0.020	0	≤30	-
Tetrachloroethene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
Trichloroethene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
Vinyl chloride	mg/L	0.0005	< 0.0005	< 0.0005	0	≤30	-
SVOCs Method: USEPA 8270E-2018							
2-Methylphenol	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
3&4-Methylphenol	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
2,4-Dinitrotoluene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Hexachlorobenzene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Hexachlorobutadiene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Hexachloroethane	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Nitrobenzene	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Pentachlorophenol	mg/L	0.0025	< 0.0025	< 0.0025	0	≤17.5	-
Pyridine	mg/L	0.002	< 0.002	< 0.002	0	≤17.5	-
2,4,5-Trichlorophenol	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-

2,4,6-Trichlorophenol	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
SVOCs Method: USEPA 8270E-2018							
Endrin	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
γ-BHC	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Toxaphene	mg/L	0.05	< 0.050	< 0.050	0	≤17.5	-
γ-Chlordane	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
α-Chlordane	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Methoxychlor	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-
Heptachlor	mg/L	0.0005	< 0.0005	< 0.0005	0	≤17.5	-

Relative deviation(RD)%= $\frac{|\text{Sample Result} - \text{Duplicate Result}| \times 100}{(\text{Sample Result} + \text{Duplicate Result})}$.

The evaluation of Relative Deviation (RD) for Duplicates: All RD of duplicates on this batch are in the controlled range, which meet the acceptance criteria of lab quality control.

Matrix Spike(MS)

Parameter	Unit	MDL	Sample result	MS Result	Spike Added	Recovery	Control range	
						%	Lower	Upper
Determination of trace elements in waters and wastes by inductively coupled plasma-mass spectrometry Method: USEPA 200.8-1994								
Arsenic (As)	mg/L	0.050	< 0.050	0.218	0.2	109	70%	130%
Barium (Ba)	mg/L	0.010	0.545	0.772	0.2	113	70%	130%
Cadmium (Cd)	mg/L	0.001	< 0.001	0.196	0.2	97.4	70%	130%
Chromium (Cr)	mg/L	0.010	< 0.010	0.197	0.2	95.0	70%	130%
Selenium (Se)	mg/L	0.050	< 0.050	0.214	0.2	107	70%	130%
Silver (Ag)	mg/L	0.010	< 0.010	0.205	0.2	99.8	70%	130%
VOCs Method: USEPA 8260D-2018								
Benzene	mg/L	0.0005	< 0.0005	0.0188	0.02	93.9	50%	150%
Carbon tetrachloride	mg/L	0.0005	< 0.0005	0.0223	0.02	112	50%	150%
Chlorobenzene	mg/L	0.0005	< 0.0005	0.0198	0.02	99.1	50%	150%
Chloroform	mg/L	0.0005	< 0.0005	0.0200	0.02	100	50%	150%
1,4-Dichlorobenzene	mg/L	0.0005	< 0.0005	0.0192	0.02	95.8	50%	150%
1,2-Dichloroethane	mg/L	0.0005	< 0.0005	0.0205	0.02	103	50%	150%
1,1-Dichloroethene	mg/L	0.0005	< 0.0005	0.0220	0.02	110	50%	150%
2-butanone(MEK)	mg/L	0.02	< 0.020	< 0.020	0.02	94.1	50%	150%
Tetrachloroethene	mg/L	0.0005	< 0.0005	0.0219	0.02	110	50%	150%
Trichloroethene	mg/L	0.0005	< 0.0005	0.0197	0.02	98.6	50%	150%
Vinyl chloride	mg/L	0.0005	< 0.0005	0.0178	0.02	89.2	50%	150%

MS Recovery%= (MS Result-Sample Result) *100/Spike Added (Related factor should be taken into consideration) .

The evaluation of recoveries for Matrix Spiked (MS): All recoveries for MS on this batch are in the controlled range, which meet the acceptance criteria of lab quality control.

Matrix Spike Duplicate(MSD)

Parameter	unit	MDL	MS Recovery%	MSD Recovery%	RD	RD Control Range%	Sur Control Range
					%		
Determination of trace elements in waters and wastes by inductively coupled plasma-mass spectrometry Method: USEPA 200.8-1994							
Arsenic (As)	mg/L	0.05	109	103	2.8	≤20	-
Barium (Ba)	mg/L	0.01	113	99	6.7	≤20	-
Cadmium (Cd)	mg/L	0.001	97.4	93.2	2.2	≤20	-
Chromium (Cr)	mg/L	0.01	95.0	89.8	2.8	≤20	-
Selenium (Se)	mg/L	0.05	107	112	2.2	≤20	-
Silver (Ag)	mg/L	0.01	99.8	94.5	2.8	≤20	-
VOCs Method: USEPA 8260D-2018							
Benzene	mg/L	0.0005	93.9	99.4	2.9	≤30	-
Carbon tetrachloride	mg/L	0.0005	112	114	0.9	≤30	-
Chlorobenzene	mg/L	0.0005	99.1	102	1.3	≤30	-
Chloroform	mg/L	0.0005	100	104	1.8	≤30	-
1,4-Dichlorobenzene	mg/L	0.0005	95.8	103	3.5	≤30	-
1,2-Dichloroethane	mg/L	0.0005	103	109	2.9	≤30	-
1,1-Dichloroethene	mg/L	0.0005	110	95.6	7	≤30	-
2-butanone(MEK)	mg/L	0.02	94.1	105	5.7	≤30	-
Tetrachloroethene	mg/L	0.0005	110	110	0	≤30	-
Trichloroethene	mg/L	0.0005	98.6	103	2	≤30	-
Vinyl chloride	mg/L	0.0005	89.2	101	6	≤30	-

Relative deviation(RD)%=|MS Recovery% -MSD Recovery%|*100/(MS Recovery%+MSD Recovery%).

The evaluation of Matrix Spiked Duplicates (MSD): All recoveries for MSD on this batch are in the controlled range, which meet the acceptance criteria of lab quality control. All RD for MS and MSD on this batch are in the controlled range, which meet the acceptance criteria of lab quality control.

Sample No.	Description	
1	PV Module Solid waste	

---End of Report---

Please note that every statement made in this report is only valid for the samples tested and reported herein. Samples were provided by applicant. Without consent of the testing organization, this report shall not be reproduced except in full and the clients shall not be unauthorized use of test results for improper propaganda. DEKRA declines any responsibility with deviations required by the customer that may affect the validity of result. The information is provided by the customer in this report may affect the validity of the results; the test lab is not responsible for it. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to calculate the uncertainty associated with the measurement result, unless the specification, standard or customer have special requirements. This report is not used for social proof function in China market