National Institute of Solar Energy
(Formerly known as Solar Energy Centre)
(An autonomous institute of Ministry of New & Renewable Energy)
Village & Post-Gwalpahari, Dist.-Gurgaon, (Haryana), Pin – 122003
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2017-2018

TEST REPORT ON BATTERY

Sample ID No. 19/17/BT

Manufactured by: M/s Eastman Auto & Power Ltd., Tehsil-Nalagarh, Solan, H.P.-174101

Submitted by : M/s Eastman Auto & Power Ltd., 547, Udyog Vihar, Phase-V, Gurgaon-122016, Haryana

This is a report on measurements of **Capacity rating, Charge efficiency & Self Discharge** carried out on the Battery (sample no. **19/17/BT)** submitted at National Institute of Solar Energy as per **IS 13369:1992** standard. **The data reported in this TEST REPORT are valid at the time of and under the stipulated conditions of measurement and the test results are applicable to this battery only and do not apply to other batteries even though declared to be identical.** The data contents in this report do not constitute a qualification test certificate. NISE does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in this report.

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Sharma 24/10/2017

R Singh 24/10/17

Rajesh Kumar 24/10/17

S Kumar 25/10/2017

National Institute of Solar Energy NISE (An Autonomous Institute of MNRE, Govt. of India) Pin:122 003 Gurugram

TEST REPORT
OF
LEAD ACID BATTERY

Sample ID No. 19/17/BT

Manufactured by: M/s Eastman Auto & Power Ltd., Tehsil-Nalagarh, Solan, H.P.-174101

Submitted by : M/s Eastman Auto & Power Ltd., 547, Udyog Vihar, Phase-V, Gurgaon-122016, Haryana

S.No	Test Description	Manufacture's Claim	Observations	Remarks
1	(I) Brand/Model (ii) Type (iii) S.No. (iv) Year (v) **Rating** (a) Voltage (b) **Capacity** at C/10 discharge rate	Eastman/EM100SB Tubular Lead Acid PV11687644 2017 12V 100Ah	Eastman/EM100SB Tubular Lead Acid PV11687644 2017 12V 107.33Ah	cut off voltage **10.8 V**
2	**Charging Efficiency:** **(A)** Capacity on discharging at (C/10) constant current continuously up to cut off voltage. **(B)**Capacity after recharging the battery by **111.01Ah** and then again discharging up to cut off voltage. **(C)**Efficiency-Ah & Wh		111.01Ah 100.46Ah 90.50% & 78.04%	Average Charging Voltage **=13.8V** Average discharging voltage **=11.9V**

P.Sharma 24/10/2017

B.Singh 24/10/17

Rajesh Kumar 24/10/17

S.Reddy 25/10/2017

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3	**Self-discharge test:** **(A)** Initial Capacity measured as per IS 13369:1992 **(B)** Final Capacity after keeping 28 days at 27 ±5 deg.C temperature. **(C)** Self Discharge (%)		106.65Ah 96.09Ah 9.90%

Tested & Prepared By:
Bipin Kumar Sharma
Date: 24/10/2017

Checked By:
Rashmi Singh
Date: 24/10/17

Approved By:
Dr. Rajesh Kumar
Date: 24/10/17

Issued By:
Name:
Date: 25/10/2017

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