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
Ph. 0124-2579251 (CSC), Fax: 0124-2579207

2017-2018

TEST REPORT ON BATTERY

Sample ID No. 23/17/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. **23/17/BT)** submitted at National Institute of Solar Energy as per **IS 15549:2005** 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 Singh 24/10/17 Rajeev Kumar 24/10/17 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. 23/17/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/E225G Tubular Gel E225G0002 2017 12V 200Ah	Eastman/E225G Tubular Gel E225G0002 2017 12V 208.56Ah	cut off voltage **10.5 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 **204.07Ah** and then again discharging up to cut off voltage. (C)Efficiency-Ah & Wh		204.07Ah 184.74Ah 90.53% & 79.21%	Average Charging Voltage **=13.6V** Average discharging voltage **=11.9V**

Sharma 24/10/2017

R Singh 24/10/17

Rajeev Kumar 24/10/17

S Ruhela 25/10/2017

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2017-2018

TEST REPORT ON BATTERY

Sample ID No. 63/17/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 measurement of **Self Discharge** only carried out on the Battery (sample no. **63/17/BT)** submitted at National Institute of Solar Energy as per **IS 15549:2005** 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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03/05/2018 3/5/2018 08/05/2018

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. 63/17/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) Voltage	Eastman/E225G Tubular Gel TG0014 - 12V	Eastman/E225G Tubular Gel TG0014 - 12V	
2	**Self-discharge test:** **(A)** Initial Capacity measured as per IS 15549:2005 **(B)** Final Capacity after keeping 28 days at 27 ±5 deg.C temperature. **(C)** Self Discharge (%)		206.7Ah 199.7Ah 3.39%	cut off voltage **10.5 V**

The Himachal Pradesh State Pollution Control Board's consent for manufacturing batteries by M/s Eastman Auto & Power Ltd., Tehsil-Nalagarh, Solan, Himachal Pradesh has been expired on 31-03-2018.

Tested & Prepared By:	Checked By:	Approved By:	Issued By:
Bipin Kumar Sharma	Rashmi Singh	Dr. Rajesh Kumar	Name:
JRS	JRS	Director, MNRE	Designation:

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