

**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. 14/17/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. 14/17/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.

The Test Report, if reproduced for any purpose, commercial or otherwise, should be reproduced in full. The contents of the report can be published only after a written approval from the Director General, NISE. This report consists of 3 pages.

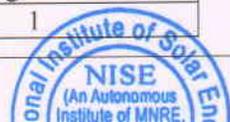
*Shukla*  
25/10/2017

*Bhargava*  
24/10/2017

*R Singh*  
24/10/2017

*Rajendra Kumar*  
24/10/17

Test Report No.	Total No. of pages	Page No.
14/17/BT/NISE	3	1



## TEST REPORT OF LEAD ACID BATTERY

**Sample ID No. 14/17/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) <b>Rating</b> (a) Voltage (b) <b>Capacity</b> at C/10 discharge rate	ADDO/EA120SB Tubular Lead Acid 00008 2017 12V 120Ah	ADDO/EA120SB Tubular Lead Acid 00008 2017 12V 139.84Ah	cut off voltage <b>10.8 V</b>
2	<b>Charging Efficiency:</b>  (A) Capacity on discharging at (C/10) constant current continuously up to cut off voltage.  (B) Capacity after recharging the battery by <b>134.4Ah</b> and then again discharging up to cut off voltage.  (C) Efficiency-Ah & Wh		134.4Ah  124.2Ah  92.4% & 78.4%	Average Charging Voltage <b>=13.9V</b>  Average discharging voltage <b>=11.8V</b>

*S. K. Singh*  
25/10/2017

*B. Sharma*  
24/10/2017

*R. Singh*  
24/10/2017

*Regional Officer*  
24/10/17

Test Report No.	Total No. of pages	Page No.
14/17/BT/NISE	3	2



3	<b>Self-discharge test:</b>  <b>(A)</b> Initial Capacity measured as per IS 13369:1992  <b>(B)</b> Final Capacity after keeping 28 days at 27 ±5 deg.C temperature.  <b>(C)</b> Self Discharge (%)		134.45 Ah  129.93 Ah  3.36%
---	--	--	---

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

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

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

**Issued By:** *Rajesh Kumar*  
 Name:  
 Date: *25/10/2017*



Test Report No.	Total No. of pages	Page No.
14/17/BT/NISE	3	3