



सत्यमेव जयते

भारत सरकार  
Government of India

## राष्ट्रीय परीक्षण शाला (पूर्वी क्षेत्र)

National Test House (Eastern Region)

11/1, जजेस कोर्ट रोड, अलीपुर, कोलकाता - 700 027

11/1, Judges' Court Road, Alipore, Kolkata - 700 027



Number of Copies issued Single

TEST CERTIFICATE

INTERIM/FINAL REPORT

परीक्षण प्रमाण पत्र सं  
Test Certificate No

जारी होने की तिथि  
Date of Issue

कोड नं  
Code No

पृष्ठ  
Page

पृष्ठों की संख्या  
No of Pages

NTH(ER)/EL(A)/2021/0021A

19/02/2021

1593065478368

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जिसे जारी करना है

OKAYA POWER PRIVATE LIMITED

Issued To

पता : D-7,Udyog Nagar,Rohtak Road, New Delhi - 110041.

Address

ग्राहक का सन्दर्भ सं एवं दिनांक  
Customer's Ref. No.

Email

Date: 16/04/2020

पंजिका सं एवं दिनांक  
Register No & Date

0021/NTH(ER)/EL(A)/15/01/2021

परीक्षण सामग्री का विवरण  
Description of Test Item

One sample consisting of 06 nos. Lead Acid batteries stated to be 12V 40Ah at C10 rate Solar Batteries,Brand:OKAYA.

परीक्षण सामग्री का पहचान  
Identification of Test Item

Marking:As in attached sheet "IS:16270".

नमूना का विशिष्टि (यदि हों)  
Product Specification (If any)

Not Applicable.

नमूना प्राप्ति की तिथि  
Date of Receipt of the Test Item

25/06/2020

कार्य सम्पादन की तिथि  
Date(s) of Performance of Tests

From: 15/01/2021

To: 19/02/2021

व्यावहृत प्रणाली का पहचान  
Method(s) used for Test

IS:16270-2014.

नमूना प्रक्रिया जहाँ प्रासंगिक हों  
Sampling Procedure where relevant

Not Applicable.

Tested By

Sayantn Das

SO Electrical

Checked By

Samriddha Gangopadhyay

SO Electrical

Approved By

Pradip Kumar Bera

Scientist- C (Electrical)



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परीक्षण प्रमाण पत्र

FORM NO : NTH/ALP/F/5



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Sl. No.

Test Name

Test Result

Limit

1 Discrete Tests As in attached sheet "IS:16270".

As in attached sheet  
"IS:16270".

टिप्पणी

Note : The sample so far as it has been examined and tested meets the requirements of specification no. IS:16270-2014 in respect of tests carried out.

कैफियत  
Remarks

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## TEST CERTIFICATE

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"IS:16270"

**Marking:** (i) Printed on both wider sides of a Battery :

OKAYA  
Chalti Rahe Yeh Zindagi  
SOLAR  
TUBULAR BATTERY  
ST040S  
Capacity 40Ah @ C<sub>10</sub> , Sp. Gr.:1.240±0.005 (27°C)

(ii) Printed on narrow side of a Battery :

SOLAR PHOTOVOLTAIC & OTHER DEEP CYCLING APPLICATIONS  
MAINTENANCE TIPS

1. Normal recharge voltage to be set 2.25 volts per cell (13.5 for 12V Battery)
2. The maximum charging current should not exceed 8 Amps.
3. The battery should be topped with battery grade distilled water upto the bottom of the filling spout approximately once in 4-6 months.  
DO NOT ADD ACID
4. The terminal connections should be kept tight and covered with petroleum jelly.
5. Terminals must be covered with shrouds to avoid any short circuit.
6. The battery top should be kept clean and dry.

CAUTION

1. Keep away from sparks ,cigarettes,open flame. These can cause EXPLOSIONS.
2. Contact with ACID from battery can cause SEVERE BURNS.
3. Keep out of reach of CHILDREN.
4. Remove vent caps before INITIAL CHARGING.
5. Replace with ceramic vent plugs.

OKAYA  
SOLAR

(iii) On the top of a Battery :

Positive polarity embossed with '+' symbol & marked with red colour.  
Negative polarity embossed with '-' symbol & marked with blue colour.  
OKAYA (Embossed)

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"IS:16270"

(iv) Engraved on the top of a Battery :  
HSIGR02905009113

The marking of the other Batteries are same & identical except Nos. HSIGR02905009110, HSIGR02905009109, HSIGR02905009112, HSIGR02905009100. Six nos. 12V,40Ah Batteries were marked randomly as GP1,GP2,GP3,GP4,GP5 & GP6 by this laboratory for identification purpose.

Tests :

[Carried out as per IS:16270-2014 & customer requirements]

Sl. No.	Test Name	Requirements	Test Result						Remarks
1	Test for Capacity : (Carried out as per Cl.8.1 of the specification read with IS:13369-1992)	Capacity in ampere-hours (Ah) at C <sub>10</sub> rate corrected to 27°C	Shall not be less than 40Ah and shall not be more than 52Ah						Satisfactory
			Battery marked						
			GP1	GP2	GP3	GP4	GP5	GP6	
			51.721Ah	51.647Ah	50.841Ah	51.776Ah	51.804Ah	43.195Ah	
2.	Charge Retention Test: (Carried out as per Cl.8.3 of the specification read with IS:13369-1992)	Loss of capacity (in %) :	Shall not exceed 10%						Satisfactory
			Battery marked						
			GP1			GP2			
			5.56			5.05			

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Sl. No.	Test Name	Requirements	Test Result	Remarks
3.	<b>Recovery from sulphation test:</b> (Carried out as per Cl.8.3 of the specification)			Satisfactory
	Discharge duration of battery in Hrs. at 120h rate to an end voltage of 1.9V/Cell	The battery shall give at least 108 hrs.	Battery marked GP3 125.88 Hrs.	
4.	<b>Water loss on Float Charge test :</b> (Carried out as per Cl.8.6 of the specification read with IS:13369-1992)			Satisfactory
	Loss of Water (in g/Ah/Battery) :	18 (Maximum)	Battery marked GP4 12.45	

Tested By

*Sayantan Das*

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