



Indian Register of Shipping

TYPE APPROVAL CERTIFICATE


PLACE: MUMBAI

ISSUE DATE: 28/06/2017

CERTIFICATE NO: 2017TAC049

This is to certify that the product described below has been included in the list of approved products and considered suitable for use on ships classed or intended to be classed with Indian Register of Shipping.

MANUFACTURER	M/S Ayiswarya Polymers
MANUFACTURING WORKS	6-B, Sengalipalyam, N.G.G.O. Colony (Post), Coimbatore - 641 022, Tamilnadu, India.
REGISTERED OFFICE	139/213, Ravindranath Lay out, New siddhapudur, Coimbatore - 641 044, Tamilnadu, India.
PRODUCT NAME	F.R.P. RESIN
MODEL NO / TRADE NAME	AIPOL 4101
PRODUCT DESCRIPTION	ORTHOPHTHALIC Unsaturated Polyester Resin used for Composite Boat Manufacturing
APPLICABLE RULES/STANDARDS/CODES	Rules and Regulation for the Construction and Classification of High Speed Crafts and Light Crafts, July 2016.
CONDITIONS OF APPROVAL	SEE Annexure I & II
VALIDITY	The Certificate is valid until 27/06/2022


Premjit Panigrahi
Principal Surveyor

This Certificate is issued upon the following terms and conditions as laid down in the Society's Regulations:-

"Whilst Indian Register of Shipping (hereinafter referred to as IRS) and its Committees use their best endeavours to ensure that the functions of IRS are properly carried out, in providing services, information or advice neither IRS nor any of its servants or agents warrants the accuracy of any information or advice supplied. Except as set out herein neither IRS nor any of its servants or agents (on behalf of each of whom IRS has agreed this clause) shall be liable for any loss damage or expense whatever sustained by any person due to any act or omission or error of whatsoever nature and however caused of IRS its servants or agents or due to any inaccuracy of whatsoever nature and howsoever caused in any information or advice given in any way whatsoever by or on behalf of IRS, even if held to amount to a breach of warranty. Nevertheless, if any person uses services of IRS, or relies on any information or advice given by or on behalf of IRS and suffers loss damage or expenses thereby which is proved to have been due to any negligent act omission or error of IRS its servants or agents or any negligent inaccuracy in information or advice given by or on behalf of IRS then IRS will pay compensation to such person for his proved loss up to but not exceeding the amount of the fee charged by IRS for that particular service, information or advice.

Any notice of claim for loss, damage or expense as referred to above shall be made in writing to IRS Head Office within six months of the date when the service information or advice was first provided, failing which all the rights to any such claim shall be forfeited and IRS shall be relieved and discharged from all liabilities."

ANNEXURE - I

(TO CERTIFICATE NO. 2017TAC049 DATED 28th June 2017)

CONDITIONS OF APPROVAL

1. The manufacturer's nominal values of the properties of the liquid resin as indicated below:

SR. NO.	PROPERTIES	MNV.
1	Specific gravity @ 25 deg C	1.10 -1.23
2	Viscosity, cP, (Brookfields) @ 25 deg C	600-1400
3	Acid Value, (mg KOH/g)	17-23
4	Monomer content (%)	30-38
5	Gel time (minutes) at 25 deg C (Butanox M-50 and 1.5ml of MEKP)	13-22
6	Shrinkage during cure	6-8%

MNV: Manufacturer's Nominal Value

- The manufacturing unit is to maintain valid ISO 9001 certification at all times.
- Change in the composition of material will require re-approval.
- Orthophthalic polyester resins are not to be used in the main hull.
- Approval will be withdrawn should the properties obtained after testing deviate significantly from Rule requirements.
- The supplier is to submit a copy of test certificate indicating physical and chemical properties of the product of each batch.
- The cosmetic aspects of any pigmentation have not been taken in to consideration for the purposes of this approval.
- The manufacturer's certificate is to contain the following data:
 - Certificate number and date
 - Designation of product
 - Quantity of the delivery
 - Date of manufacture
 - Signature of the firm's director or a person authorized by him
- Any alteration being made to manufacturing facilities and procedures would require re-assessment of the works for continued approval.


Premjit Panigrahi
Principal Surveyor

ANNEXURE – II

(TO CERTIFICATE NO. 2017TAC049 DATED 28th June 2017)

The Validity of this Certificate is subject to satisfactory completion of Annual audits in accordance with Society's Requirements.

Annual Inspection Due : June 2018
June 2019
June 2020
June 2021

Signature _____

Surveyor's Name _____

IRS Stamp

Outport _____

Date _____

Signature _____

Surveyor's Name _____

IRS Stamp

Outport _____

Date _____

Signature _____

Surveyor's Name _____

IRS Stamp

Outport _____

Date _____

Signature _____

Surveyor's Name _____

IRS Stamp

Outport _____

Date _____
