

# Palatal® A400TV-957 S

## Low shrinkage isophthalic resin for hand lay-up and spray-up application

Components based on Palatal A400TV-957S feature superior dimensional stability and low fiber print.

### Benefits

- Low shrinkage.
- Excellent tack free property.
- Good heat resistance
- Good hydrolysis resistance
- CCS 1 Class resin certification

### Chemical/Physical Nature

Palatal® A 400TV-957 S is a pre-accelerated, thixotropic unsaturated polyester resin based on Isophthalic acid and standard glycols, dissolved in styrene. The resin has a low viscosity and a medium reactivity. A color change system have been incorporated.

### Application

Palatal® A 400 TV-957 S is well suited for hand lay-up and spray techniques. It readily impregnates the reinforcing materials during lay-up and does not run off inclined laminates. It is specially used for marine like hull and deck, tanks, pipes that contacts with water. It has low exothermal and low shrinkage ,also good tack free property. Palatal® A400TV-957S is good in mechanical properties and has high HDT.Palatal® A 400 TV-957 has been approved as 1 class resin by China Classification Society (CCS) for boat building.

### Product Specification

Property	Value	Unit	TM
Appreance	Hazy	-	TM_2265
Solids content, IR drying	52-58	%	TM_2033
Acid value	11-18	mgKOH/g	TM_2401
Viscosity @23°C	180-250	mPa.s	TM_2013
Gel time(25°Cto35 °C)	40-70	min	TM_2625

### Remarks

TM2625: 1.5g Butanox® M50 added to 100 g resin.

### Liquid resin typical properties

Property	Value	Unit	TM
Flash point	33	°C	TM 2800
Stability, no initiator, dark, 25 °C	3	Month	-

### Unfilled castings typical properties

Property	Value	Unit	TM
Tensile strength	65	MPa	ISO 527-2
Tensile modulus	3,6	GPa	ISO 527-2
Tensile elongation	2.4	%	ISO 527-2
Flexural strength	110	MPa	ISO 178
Flexural modulus	3.7	GPa	ISO 178
HDT	95	°C	ISO 75 Ae
Unnotched impact strength	10	kJ/m2	ISO 179

### Remarks

Curing conditions:Cured with 1.5g Butanox M50 added to 100 g resin.After 24h at RT followed by post curing for 24 h at 80 °C.

### Storage Guidelines

The resin should be stored in a dark and dry place at temperatures between 5 °C and 30 °C. Shelf life is reduced when resin is stored at higher temperatures and the properties of the resin might change during storage. Store in dark and in 100% light tight containers only. Exposure to direct sunlight should be avoided.

### Material Safety

A Material Safety Data Sheet of this product is available on request.

### Test Methods

Test methods (TM) referred to in the table(s) are available on request.

## Processing Guidelines

A. Recommend MEKP as curing agent. The dosage is 1%~2.5%. The user can adjust the dosage according to the environment temperature and process time.

B. Laminates feature good tack free property. Once needing secondary lamination we suggest sanding before secondary process.

C. Thixotropy resin. We suggest gently stirring before use.

## Application Guidelines

Room temperature curing product should be through post curing to get the best properties. Before post curing process, the product should be curing in room temperature for 24 hours. It is better to place in room temperature for 24-48h before assembly like drilling process.

## ISO 9001:2015 Certified

The Quality Management Systems at every AOC manufacturing facility have been certified as meeting ISO 9001:2015 standards. This certification recognizes that each AOC facility has an internationally accepted model in place for managing and assuring quality. We follow the practices set forth in this model to add value to the resins we make for our customers.

## About AOC

AOC is the leading global supplier of resins and specialty materials which enable customers to create robust, durable and versatile products and components. With strong capabilities around the world in manufacturing and science, the company works closely with customers to deliver unrivaled quality, service and reliability for today, and create innovative solutions for tomorrow. Partner with AOC and we will work together to find the right solutions for your business.

**AOC. Trusted Solutions**

## Brochures

You can find additional information through the Product Guide. For detailed information on the system solution, please consult our Marine Brochure. Both brochures are available from our Business Technical Supports Engineer and Account Manager.

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