

# MATERIALS PERMITTED UNDER 1.11 FOR CONSTRUCTION OF GLASS FIBRE AND OTHER DRAGONS

Effective January 1996 Revised November 2001

#### 1. **DEFINITIONS**

1.1	FIBREGLASS CLOTH:	A woven fabric made from fine yams of fiberglass.
1.2	FIBREGLASS MAT:	Material of randomly oriented glass fibres held together with a binder. Other names used: Chopped Strand Mat (CSM).
1.3	WOVEN ROVEN:	Rovings of fiberglass woven into a material.
1.4	UNDIRECTIONAL:	A material of glass yarns all in one direction usually held together by a thin filament such as "Fibril" or stitched together. Other name used: Single Bias.
1.5	<b>BI-DIRECTIONAL:</b>	A material of glass yams in two different directions stitched together.
1.6	DOUBLE BIAS:	A 45 degree / 45 degree bias woven material.
1.7	TRI-AXIAL:	A 60 degree / 60 degree / 60 degree triple bias woven material.
1.8	FABMAT:	A combination material of WOVEN ROVEN and a layer of FIBREGLASS MAT held together with a binder (powder or emulsion).
1.9	STITCHMAT:	A combination material of WOVEN ROVEN and a layer of FIBREGLASS MAT stitched together.
1.10	E-GLASS	Fibreglass-based material commonly used in boat building.
1.11	S-GLASS	Fibreglass-based material with higher strength and stiffness than GLASS.

#### 2. PERMITTED MATERIALS FOR GLASS FIBRE HULL SHELL CONSTRUCTION

2.1 Glassfibre:

E-GLASS FIBREGLASS MAT Powder bonded E-GLASS FIBREGLASS MAT Emulsion bonded E-GLASS WOVEN ROVEN E-GLASS FIBREGLASS CLOTH E-GLASS DOUBLE BIAS / FIBREGLASS MAT stitched together E-GLASS UNIDIRECTIONAL / FIBREGLASS MAT stitched together E-GLASS BI-DIRECTIONAL / FIBREGLASS MAT emulsion bonded E-GLASS BI-DIRECTIONAL / FIBREGLASS MAT stitched together E-GLASS BI-DIRECTIONAL / FIBREGLASS MAT emulsion bonded

2.2 Resins:

The following resins are allowed:

- 1. Thermosetting, non-saturated Polyester resin, catalyzed with Methyl Ethyl Ketone Peroxide
- 2. Thermosetting, non-saturated Vinylester resin, catalyzed with Methyl Ethyl Ketone Peroxide

No Hybrid Resins are allowed except the following:

- 1. Epacryn 915AT by SP systems
- 2. Epacryn 925AT by SP systems
- 2.3 Gel coat and topcoat

Gel coat based on the following resins are allowed:

- 1. Thermosetting, non-saturated Polyester resin, catalyzed with Methyl Ethyl Ketone Peroxide
- 2. Thermosetting, non-saturated Vinylester resin, catalyzed with Methyl Ethyl Ketone Peroxide

## 3. PERMITTED MATERIALS FOR DECK / COAMING / CABIN CONSTRUCTION FOR GLASS FIBRE DRAGONS

3.1 Glassfibre:

E-GLASS FIBREGLASS MAT Powder bonded E-GLASS FIBREGLASS MAT Emulsion bonded E-GLASS WOVEN ROVEN E-GLASS FIBREGLASS CLOTH E-GLASS DOUBLE BIAS / FIBREGLASS MAT stitched together E-GLASS UNIDIRECTIONAL / FIBREGLASS MAT stitched together E-GLASS BI-DIRECTIONAL / FIBREGLASS MAT emulsion bonded E-GLASS BI-DIRECTIONAL / FIBREGLASS MAT stitched together E-GLASS BI-DIRECTIONAL / FIBREGLASS MAT emulsion bonded

3.2 Resins:

The following resins are allowed:

- 1. Thermosetting, non-saturated Polyester resin, catalyzed with Methyl Ethyl Ketone Peroxide
- 2. Thermosetting, non-saturated Vinylester resin, catalyzed with Methyl Ethyl Ketone Peroxide

No Hybrid Resins are allowed except the following:

- 1. Epacryn 915AT by SP systems
- 2. Epacryn 925AT by SP systems
- 3.3 Gel coat and topcoat

Gel coat based on the following resins are allowed:

- 1. Thermosetting, non-saturated Polyester resin, catalyzed with Methyl Ethyl Ketone Peroxide
- 2. Thermosetting, non-saturated Vinylester resin, catalyzed with Methyl Ethyl Ketone Peroxide
- 3.4 Sandwitch material

Gel coat based on the following resins are allowed:

- 1. Balsa with minimum density of 130 kg/m3
- 2. Foam with a minimum density of 80 kg/m3
- 3. Plywood crush pads according to Class Rules

### 4. METAL MATERIALS FOR USE ON ANY TYPE OF DRAGON

Brass, Bronze, Gunmetal, Monel, Cast Iron, Galvanised Mild Steel, Stainless Steel and Aluminium Alloy.