



**UNDERSTANDING
THE MARKET
NEEDS WITH**

EASYLAM
GENERAL PURPOSE RESIN

**POTENTIAL 30%
LAMINATE COST SAVING**

IMPROVED WET OUT

REDUCED FIBRE PRINT

REDUCED STYRENE CONTENT

LESS GLASSFIBRE

LABOUR SAVINGS

HAND LAY UP

SPRAY LAY UP

SAVINGS WHEN YOU NEED THEM!

Resins par excellence

	EASYLAM	ENCORE
Glass (450 CSM)	2 layers	3 layers
Resin (Kgs)	3.15	2.7
Total weight (Kgs)	4.05	4.05
Laminate thickness (mm)	3.5-4	3.5-4
Barcol Hardness (Barcol 934-1)	40	40
Styrene content (%)	29	40



APPEARANCE - Opaque off-white liquid resin

MAIN RESIN CHARACTERISTICS

- Thixotropic
- Preaccelerated
- Medium reactivity
- Low styrene content
- Low styrene emission

MOULDING INFORMATION - Hand lay up / Spray lay up

MAIN APPLICATIONS

General moulding with reduced fibre print through

LIQUID RESIN PROPERTIES (Typical values)

- Volatile content: 28 – 33%
- Viscosity at 25°C: 2.8 – 3.4 dPa.s
- Gel time 20°C (2% MEKP 50) 16–20 minutes

CURED RESIN LAMINATE PROPERTIES (Typical values)

- Tensile ISO 527
 - strength: 60 MPa
 - elongation at break: 1%
- Flexural ISO 178
 - strength: 125 MPa
 - modulus: 4500 MPa
- Barcol Hardness: 40 – 45 (Barcol 934-1)

SHELF LIFE - 6 months

GUIDELINES BEFORE USE - Materials should be conditioned to a reasonable temperature (15°C minimum) prior to use. Resin should be agitated before use to ensure a homogeneous working mix. For further information please consult our Application Guide.

SAFETY PRECAUTIONS FOR HANDLING AND STORAGE

FOR FULL DETAILS PLEASE REFER TO SDS - Polyester resins contain styrene monomer, classified as **HARMFUL** by inhalation and **IRRITATING** to eyes and skin. With a flash point **below 32°C**, polyester resins are classified with the proper shipping name 'resin solution, flammable' as determined by ADR Marginal 2301 Item 54. The current UK EH40 styrene occupational exposure limit is a MEL of 100ppm (8 hr TWA). And there is an industry, voluntary code of practice to work below 50 ppm. The Environmental Protection Act (1990, 1995) must also be complied with. Resins should be stored cool, away from direct sunlight in closed containers. When stored in bulk, adequate venting of tanks is recommended together with a storage temperature not exceeding 20°C.



Easylam polyester resins have unique properties not available from any others currently on offer in the UK.

Obtainable from CFS Fibreglass

Objective: To make two panels (one using Encore 30, one using Easylam) and compare mechanical tests, thickness of laminate, cosmetics, labour saving and costs:

Encore 30 Laminate

This panel was made using two coats of White brush Gelcoat, followed by 3 layers of 600 gram chopped strand mat consolidated using 1425 grams of Encore 30 resin & catalysed @ 1.5% M50.

3 ply of Glass = 648 grams @ 2.2:1 resin to glass ratio = 1425 grams Encore 30 resin

Cost of resin = £2.36 (£1.66 kg "Standard selling price" x 1425 grams resin)

Cost of CSM (£1.80 kg "Standard selling price" x 648 grams glass) = £1.17

Total material cost £3.53

Easylam Laminate

This panel was made using two coats of White brush Gelcoat, followed by 2 layers of 600 gram chopped strand mat consolidated using 1462 grams of Easylam resin & catalysed @ 1.5% M50.

2 ply of Glass = 432 grams @ 2.2:1 resin to glass ratio = 950 grams resin = 1462 grams Easylam resin

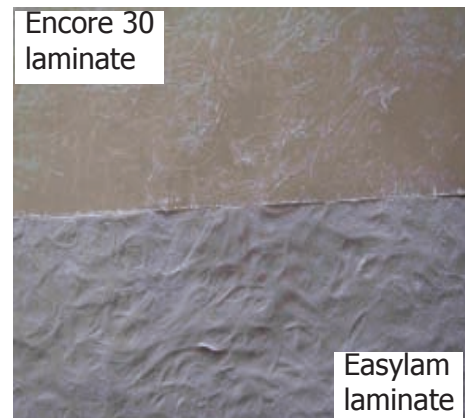
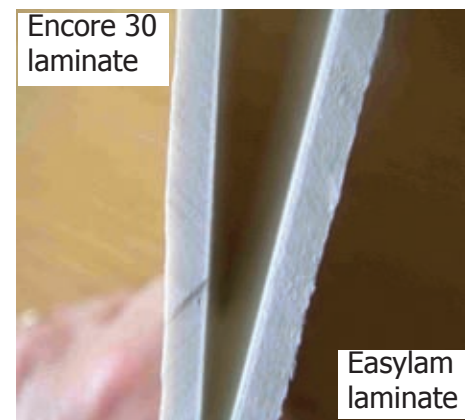
Cost of resin = £1.85 (£1.27 kg "Standard selling price" x 1462 grams resin)

Cost of CSM (£1.80 kg "Standard selling price" x 432 grams glass) = £0.78

Total material cost £2.63

Saving £0.90 (25%)

Results	Enc 30	Easylam
Tensile - strength:	100 MPa	60 MPa
- modulus:	7200 MPa	9300 Mpa
- elongation at break:	1.5 %	0.9 %
Flexural ISO 178		
- strength:	145 MPa	125 MPa
- modulus:	4700 MPa	4500MPa
Total glass content	31%	22%
Barcol Hardness (Barcol 934-1)	35 – 40	40
Laminate thickness	4 -4.5mm	3 – 3.5 mm
Glass layers	3 layers	2 layers
Resin & Glass Cost	£3.53	£2.63



This exercise shows a reduction in labour by 33% and a cost saving of 25%.