



# TDS06 REGAFILM January 2004

## REGAFILM – Stained Glass Art Film

### 1. PRODUCT DESCRIPTION

RegaFilm is the generic name for a range of self-adhesive “Stained Glass Art Film” manufactured by Regalead Ltd. The product range has been developed to provide manufacturers and designers of decorative glass elements an extensive library of colours, textures and embossed filmic materials which, when applied to clear glass, simulate stained glass products. The products are normally used in conjunction with Regalead self-adhesive profiles to produce finished products in many application areas including doors, windows, internal screens and other decorative glass projects.

### 2. PRODUCT CONSTRUCTION

RegaFilm and Spectrum film consist of an ink-based colourant between 2 layers of weather resistant, mylar extended life polyester film – a base and laminating top layer. The adhesive applied to the base is protected from moisture penetration by a rigid paper release liner, which is removed and discarded prior to use. The complete product is 75 microns thick, has the optical clarity of glass and is designed to simulate stained glass.

<b>Laminating Material (25 Micron Polyester)</b>
<b>Colourant</b>
<b>Base Material (50 Micron Polyester)</b>
<b>Adhesive</b>
<b>Release Liner (147 gsm Kraft Paper)</b>

#### Base Material

50 micron clear printable polyester, with excellent dimensional stability and abrasion resistance.

It is resistant to water, mild alkalis, petroleum based greases, oils, acids, salts and aliphatic solvents.

#### Colourant

High gloss inks chosen for their excellent adhesive properties, print quality and light fastness. The colourant cannot be scratched or damaged as it is protected by the polyester overlaminating.

#### Adhesive

A water clear, permanent, pressure sensitive adhesive with superior ultra-violet screening properties and high tack strength.

#### Laminating Material

25 micron clear polyester with excellent dimensional stability and abrasion resistance. It is resistant to water, mild alkalis, petroleum based greases, oils, acids, salts and aliphatic solvents, and contains UV filters.

#### Release Liner

A 147 gsm bleached kraft paper, polyethylene coated on 2 sides, specifically designed for sheet printing.

### 3. TECHNICAL SPECIFICATIONS

#### Base Material/Overlaminating Film

Ultra clear print treated polyester, laminated with water clear permanent acrylic adhesive with excellent ultra violet screening properties

#### Adhesive Specification

Thickness	0.23 microns
Temperature Range °C	-46 °C to 135 °C
Adhesion Level To Stainless Steel (Finat 1 test method)	Initial 11N/25mm (15 mins) Final 18N/25mm (72 hours)

## **Ink Systems**

Lead free solvented UV stable inks only used in film construction. Blue wool scale range 7-9.

## **4. PERFORMANCE**

### **BS5713/EN1279**

RegaFilms are used in the production of double glazed units under BS5713 and also recently introduced in the UK BSEN1279.

The requirements of BSEN1279 are met in the following ways:

#### **Annex C (normative): Fogging Test:**

Units manufactured using RegaFilm can conform to this test method.

#### **Annex G (informative): Volatile Test:**

Data is being collated and will be available to be issued to customers in late 2004.

#### **Weathering**

The performance of RegaFilms applied in normal ambient conditions worldwide is excellent.

Specific tests using ASTM G154-00 accelerated weathering tests are used from time to time.

The test method is 1000 hours exposure using UVB 313 lamps, 4 hours @ 60°C / 4 hours condensation @ 50°C undertaken at an approved laboratory. Integrity of the adhesive system and colour retention are excellent.

The test method is regarded as equivalent to a minimum 10 years life in Northern Europe.

## **5. APPLICATION & STORAGE CONDITIONS**

Minimum Application Temperature +4°C

Service Temperature Range -46°C to +135°C

The correct application of RegaFilm is important to obtain optimum performance. Full details are given in TDS05 Guidelines for the Correct Application of Regalead Products in Insulated Glass Construction. Correct storage conditions are important to reduce deterioration.

The products will have a shelf life of 12 months if stored at room temperature 20°C and normal humidity (50% - 70% RH).

The product is generally safe and no health and

## **6. GENERAL HEALTH & SAFETY**

safety hazards are anticipated provided good industrial hygiene is observed. It is non-toxic, containing no plasticisers or harmful additives.

### **Usage**

Safe methods of handling should be applied. Care should be taken to avoid cuts from film or paper edges and when unbanding pallets.

### **Fire**

The product will burn in the event of contact with a flame, with the adhesive giving off smoky fumes. Fire should be extinguished with water, providing no live electrical equipment is nearby, otherwise CO<sub>2</sub> should be used. Films melt and drip before burning, which can cause severe burns on contact with skin.

### **Waste Disposal**

Waste product can be disposed through normal trade refuse outlets. It can only be incinerated if the incinerator can cope with corrosive flue gases. It can also be recycled by melting purification and reblending.

***Information and recommendations are given in good faith and based on practical tests. No warranty or guarantee is given as to the fitness of any Goods for any particular purpose and the buyer shall have satisfied himself as to the fitness of the Goods for the purpose for which they are so required. Product covered by Standard Conditions of Sale.***