



### WHAT IS PolyFast ?

PolyFast™ is a white polyethylene film that prints like paper yet has all the benefits of plastic. Material benefits include...

- BS-5609 approved – according to material/adhesive combination
- Durability
- Strength
- Scratch resistant
- Chemical and solvent resistant
- Resistant to harsh environments
- Water resistant – including seawater
- Recyclable

Label-House labels have been designed to satisfy the regulations that apply to the two principal types of Dangerous Goods Labels – Supply and Transport. BS-5609 approved (according to material/adhesive construction), PolyFast labels comply with the 1997 Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations. These regulations require that the material, adhesive, printing inks **and** any overprint used to make self-adhesive labels must be able to withstand immersion in the sea for three months.

### PolyFast APPLICATIONS

PolyFast labels are extremely flexible; they can be manufactured in a variety of sizes (up to A3) with a variety of different adhesive types (e.g. removable and ultra strong adhesives). PolyFast labels are suited to many different applications including...

- Chemical Industry – PolyFast labels have been designed to adhere to transport/container drums

- Signage – warning and hazard signs, e.g. on fire blankets and fire extinguishers
- Paint and Solvent Industries – product labelling
- Shipping and Transportation Industries – transportation of hazardous goods **road, rail, air, sea**
- Hospitals and laboratories – clear identification of waste disposal
- Water Treatment – hazard signage
- Storage – ideal for use in humid and damp conditions
- Pallet labelling

### THE BENEFITS OF PolyFast

- Label-House quality ensures no adhesive contamination – eliminates laser printer feed problems, down time and high maintenance
- Conforms to BS-5609 (durability features, dependent on material/adhesive combination)
- Completely lay-flat sheets for multiple page feeding/high speed printing
- Print 'on demand' – laser printer compatible so you can print 'in house' – eliminates the need to out-source = saves time and money
- Excellent colour reproduction/print quality
- Purchase single blank label stock – customise 'in house' for different shipments
- Eliminates need to hold stock
- Product quality and 'in house' printing saves time and money

BS-5609 APPROVED – subject to material/adhesive combination

### **PolyFast™ – exceptional high quality waterproof labels for laser printers**

#### **BACKGROUND:**

Label-House were approached by Chemright – chemical manufacturer, to develop a label application for use at their Scottish site. Chemright manufacture a 'dry powder chemical' used as a thickening agent in the food, beverage and pharmaceutical industries. After manufacture the product is packed in paper sacks. The damp and humid coastal location of the manufacturing facility has, in the past, created huge difficulties for labelling the chemical sacks.

Chemright tested various label materials/products on their 'in house' laser printer. Paper labels were found to wrinkle – making barcodes impossible to read; vinyl and

polypropylene products did not fuse well in the laser printer and were not durable enough – causing them to scratch off the sacks during transportation.

**SOLUTION:** Label-House evaluated the problem, and after a period of research and development, proposed a solution – PolyFast labels. When tested by Chemright PolyFast was found to fuse excellently in a laser printer giving high quality reproduction. Early tests showed some wrinkling of the product when adhered to a paper sack but Label-house researched the application further to ensure that the label would not wrinkle. The PolyFast™ application was perfect for Chemright.

**BENEFITS:** The solution enables Chemright to print high quality durable labels 'in house' using their existing laser printers. PolyFast gives ultimate flexibility – 'in house' laser printing means that variable information can be printed 'on demand' saving time and money. The durable waterproof features of PolyFast enable Chemright to clearly, accurately and confidently label their products even in damp and humid conditions – no other product they tested was able to achieve this! Customer satisfaction has been improved as a result of labels being barcode readable, and mistakes caused by unclear labelling have been eliminated.

## TECHNICAL SPECIFICATION

# PolyFast

#### **Facestock**

A special polyethylene with good opacity and excellent absorption characteristics providing superior toner bonding.

Basic weight: 101 g/m<sup>2</sup> ISO 536  
Caliper: 0.178 mm ISO 534

#### **Adhesive**

adhesive, or removable.

#### **Liner**

An aggressive permanent acrylic based  
A woodfree, white kraft paper.  
Basic weight: 90 g/m<sup>2</sup> ISO 536  
Caliper: 0.095 mm ISO 534

#### **Total construction caliper**

0.290 mm ± 10%.

### **Performance characteristics**

#### **Adhesive**

The aggressive adhesive features, good tack and adhesion performance – even at low temperatures makes PolyFast ideal for applications on steel and plastic where the label has to be waterproof. Removable adhesive is ideal for signage applications.

#### **Typical values**

Peel adhesion 90°: 300N/m FTM2  
Quick stick: 600N/m FTM9  
Min. application temp: -5°C  
Service temperature: -40°C/+80°C

### **Applications and use**

This product is designed for the manufacture of laser labels for use in high speed laser printers. The high flexibility of the material ensures success negotiating most laser printer feed paths. The porous character of this special polyethylene provides excellent toner bonding and print resolution.

Due to the chemical and water resistance this product is ideal for applications in outdoor environments, for example on steel and plastic chemical drums (HDPE).

The product is also suitable for applications in the electro-technical industry, Odette labelling and pallet labelling due to its' recyclability.

#### **Environment**

PolyFast is completely recyclable.

#### **Shelf life**

Six months when stored at 22°C/50% RH in sealed packaging.

#### **Note**

This data is derived from tests carried out under controlled conditions and is intended for general guidance only. Users must carry out their own tests if they wish to satisfy themselves that the product is suitable for use under particular conditions or that it is suitable for a particular application.

#### **Adhesive options**

PolyFast is available with permanent and removable adhesives.



### **Contact**

#### **Label-House ApS**

Sgaardsvej 19  
4160 Herlufmagle  
Tlf: +45 5550 0075  
Email: Post@labelhouse.dk  
www.labelhouse.dk