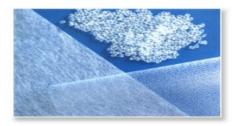
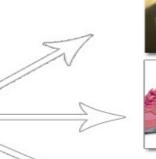
HOT MELT ADHESIVE FILMS

## SWABOND - HMAF













#### SWASAN GLOBALISED

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### adaptable SOLUTIONS SOFT, FLEXIBLE FILMS FOR A WIDE RANGE OF APPLICATIONS

**SWASAN** has been a leading developer and supplier of products based on advanced **THERMOPLASTICS & HOT MELTS** technology for more than 15 years. Our Engineered Films will work with you to select or develop the right film for your purpose.

When you need reliable adhesives, stick with **SWABOND HOT MELT ADHESIVE FILMS** (HMAF) from the **SWASAN GROUP**.

**SWABOND HMAF** are engineered to adhere to virtually any substrate, from foam and fabric to metal and wood. And they can be designed to offer a wide range of properties to suit practically any application.

Stick with us for:

- Reliability
- High quality
- Dependability
- Innovation
- A commitment to your success

# ΙΝΝΟΥΑΤΙΟΝ



adhesive solutions

## ENGINEERED to your specifications

**SWABOND HMAF** are easy to work with and can enhance your products and processes.

In addition to functioning as an adhesive, these films offer added performance properties, easy storage and handling, and design flexibility.

#### PERFORMANCE PROPERTIES

- Breathability
- Barrier properties (air, liquids, etc.)
- Strength and toughness
- Significant adhesion to strengthen substrates
- Dimensional stability and scratch and puncture resistance
- Chemical and corrosion resistance
- UV resistance
- Modified burn characteristics
- Enhanced acoustical properties
- Lower the coefficient of friction

## EASY STORAGE & HANDLING

- Furnished in a clean, dry, nontacky film form
- Manufactured in continuous rolls
- Need only heat and pressure for activation
- Simple cleanup
- Can be easily disposed or recycled
- Labor- and space-saving potentials

#### DESIGN FLEXIBILITY

- Designed for one- or twosided adhesion
- Choice of adhesives, polymer formulations and blends
- Chemical and corrosion resistance
- Wide range of bond strengths
- Modified burn characteristics
- Variety of activation temperatures

### VERSATILE Performance



SWABOND HMAF provide uniform adhesion to a wide range of substrates, including:

#### Thermoplastics

- ABS
- Textile • Cotton
- Polycarbonate
  - eate Polyester • Nylon
- Vinyl

Metal

- Foam
- Aluminum
- •Steel or
- galvanized steel
- Copper

• Cardboard

particular needs.

Paper

- Other
- Glass
  - Fiberglass

• Polyurethane

Melamine

SWABOND HMAF have proven effective in diverse applications. SWASAN professionals are available to help you select or formulate a film to fit your

### APPLIANCE

- Good adhesion
- Barrier properties
- Corrosion resistance
- Noise or vibration reduction
- Aesthetics

## FOAM

- Liquid barrier
- Breathability
- ♦ Slip
- Formability







## P A P E R, CARDBOARD AND WOOD LAMINATION

- Good adhesion
- Moisture barrier
- Improved opacity
- Thermal stability
- ♦ Surface sealing



## PROTECTIVE CLOTHING

- Chemical resistance
- Barrier properties
- Flexibility / drapability
- Formability



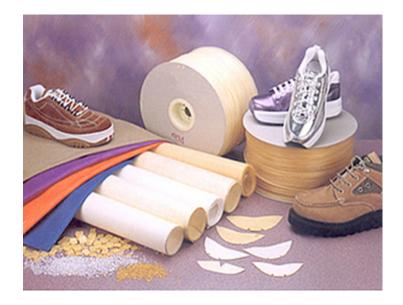
## PACKAGING

- Easy lamination to a variety of substances
- Good clarity
- High toughness and tear resistance
- Thermoformable



### TEXTILES

- Good adhesion
- ♦ Durability
- Washability
- Flexibility
- ♦ Formability
- Barrier Properties





### AUTOMOTIVE

- Good adhesion
- Heat stability
- Flex strength
- Formability
- Robustness
- Enhanced acoustical properties
- Lower the coefficient of friction



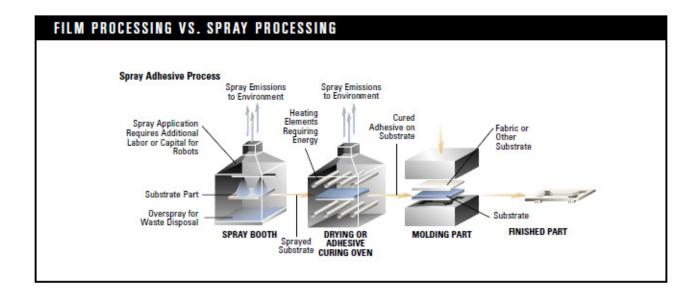
## THE CHOICE IS SIMPLE

your

SWABOND HMAF offers several advantages over liquid adhesives:

success

- Precision thickness control
- Uniform coverage
- Easy handling and storage
- Minimal pollution
- Simple cleanup
- Minimal adhesive waste
- Reduced disposal costs
- Space- and energy-savings potential



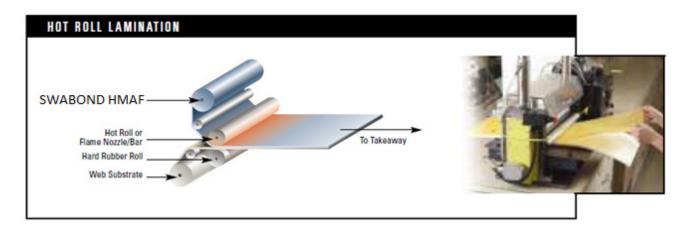


## PROCESSES

SWABOND HMAF can help simplify your processes, and save time, labor and money. These films excel in the two most common adhesion processes, lamination and molding.

#### LAMINATION

SWABOND HMAF are well-suited to lamination processes, including hot roll, belt, flame, calendar and sheet processes. As heat activates the film adhesive, pressure bonds the film to the substrate, ensuring even adhesive distribution.



#### MOLDING

SWABOND HMAF can be used in both continuous and "piece" molding operations. Heat activates the adhesive, and pressure fastens the film to the substrate. A film with the right combination of properties can melt into nonwoven and other fibrous substrates, to provide adhesion and enable thermoforming into desired shapes.





### Technical Data

## SWABOND-HMAF

### HOT MELT ADHESIVE FILMS

#### **Product description**

SWABOND HMAF is the trade name for HOT MELT adhesive films made by SWASAN. The range currently includes films based on COMPOUNDED HOT MELTS.

#### **Properties**

The SWABOND HMAF films have excellent adhesion, high cohesion, good application properties and outstanding mechanical and chemical properties:

\* resistance to washing powders and detergents

\* non-ageing

\* high stability to greases, oils and fuels This combination of properties opens up a wide range of applications.

#### **Applications**

The broad range of SWABOND HMAF hot-melt adhesive films makes the bonding easy to various substrates. SWABOND HMAF is mainly suitable for production of SHOE and FOOTWEAR components and all kinds of FOAM LAMINATIONS / FABRIC to FABRIC LAMINATIONS / OTHER TYPICAL REPLACEMENTS OF LIQUID OR LATEX BASED ADHESIVES

#### Other bonding applications include:

- > Home Textiles etc
- > Medical Industry
- > Automobile Industry
- Technical Bondings

#### Processing

The films can be activated by:

- > Heat and pressure calendering
- > Infra-red system
- > Flat-bed laminating
- > Steam Activation
- > Ultrasonic, thermal impulse and HF welding

#### Advantages to other adhesive systems

> Thermoplastic character

(no crosslinking,no pot life limitation)

- Free of solvents
- > Free of plasticizers
- > Environmentally friendly
- Exact thickness of adhesive layer
- > Economical processing

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### Technical Data

## SWABOND-HMAF

### HOT MELT ADHESIVE FILMS

#### Basic Material Properties Unit Method

#### **SWABOND - HMAF**

Density	g/cm3	0.98
Melting range (Kofler bench)	°C	90 - 100
Recommended glue line Temperature	°C	103 - 108
Temperature resistance	°C	At least 70
Appearance		Translucent
Resistance to plasticizer		Very good
Barrier to plasticizer		No
Washing resistance		60° C
Resistance to dry-cleaning agents		Good
HF - weldability		Very good

## SWABOND – HMAF are available in Roll sizes of upto 1600 mm and in various weights ranging from 20 – 100 g/m2

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