

# HIGH QUALITY SOLUTIONS FOR A WIDE RANGE OF APPLICATIONS IN THE APPLIANCE INDUSTRY

# Stokvis Tapes products are more energy-efficient, lightweight and quieter

Nowadays, global market is asking manufacturers to develop lighter, quieter and more energy-efficient home and professional appliances due to strict European regulations. At the same time, manufacturers are required to use innovative and sustainable production technologies and improve assembly efficiency. Automated manufacturing increases production output and ensures consistent quality with fewer complaints as a result. Furthermore, in the next few years we will see an increasing demand for smart, multitasking appliances, equipped with large displays and touch screens, integrated with camera, sensor, voice command, and WIFI components. From sustainable point of view repairability and recyclability will play an increasingly important role. All developments in which self-adhesive tapes and related materials play a major part, and in which Stokvis Tapes is happy to support.

# Why Stokvis?

Our goal is to offer high quality solutions to improve customer's operational efficiencies and to minimize materials waste. You will find that our products are more energy-efficient, lightweight and quieter.

Stokvis Tapes will help you improve your production process, reduce costs, help you develop new products and sell more.

How do we do this?

- Knowledgeable and experienced material and converting specialists within the appliance market.
- Global reach local support.
- ISO 7 & ISO 8 cleanroom production facilities.
- Stokvis Tapes is the world's largest independent converter of self-adhesive components.
- Innovative, cost-effective solutions for simple to complex needs.
- Full spectrum of rotary, flatbed and laser die cutting to match your needs.
- · Technical support & lab testing.

## **Our solutions**

To meet these needs, Stokvis Tapes offers optimal solutions of high-quality products for a wide range of applications in the appliance industry.

Our solutions are designed for the following applications:

- Structural mounting of plates, signs and trims
- Air gap bonding of control panels and electrical components
- Optically clear adhesive (OCA) for bonding cover glass and touchscreens
- Assembling of parts made of various substrates
- · Fixing coils and small parts
- Temporary fixing of movable parts during transport
- · Surface protection during production, transport and handling
- Electrical insulation and flame retardants
- . Thermal insulating and heat management
- Grounding and EMI/RFI shielding
- . Venting moisture and air during foaming process
- NVH insulation and reduction
- Sealing and protection against dirt, dust, grease, moisture and water



Stokvis designs adhesive solutions for all major appliances. Both for domestic and industrial use.

- Cookers
- Ovens
- Dishwashers
- Microwaves
- Freezers
- Dryers
- Refrigerators
- Washing machines
- Hoods

For easy and quick mounting Stokvis Tapes uses different pressure sensitive adhesive layers which we customize to your materials, like:

- Acrylics (conductive and non-conductive)
- Rubbers
- Silicones

Above self-adhesive layers can be customized with various single or double coated cover liners, like:

- Paper
- PET
- P0/PP
- Silflu

We have a wide choice of adhesive carriers available, like:

- Paper
- Foams
- PET
- Laminates
- PVC
- Polyamide
- MOPP
- Copper
- Aluminum
- Etc.

In addition to the products we mention in this brochure for white goods assembly, we also carry specialist solutions for displays and touch-screens on request. Hereby you can think of:

- Brightness enhancement films
- · Contrast enhancement films
- · Diffuser and translucent graphic films
- · Optically clear adhesives
- · Sensor camouflage films

# **Customizing and precision manufacturing capabilities**

Stokvis Tapes delivers focused and specialized services to meet the needs of your product. Our industry leading service capabilities are dedicated to ensure that production and environment are optimized and controlled, to meet the specific needs of each customer and application.

Our service goes beyond providing the best tape for your application. Understanding your needs and requirements is the first step in creating the perfect product for you. With our in-house converting machines, we can customize tapes to any desired size or shape.



#### Die cutting

We customize self-adhesive tapes into die-cut parts to create a perfect shaped part for your product or production process. This helps you cut down waste, improve the quality of your product and speed up the production process. By adding extra options, the effect is even bigger.

## Laminating

We're able to make your own product self-adhesive or laminate different tapes and other flexible materials on each other. Whether it's one layer or five, we combine all kinds of flexible materials to create unique self-adhesive products.

## **Cutting**

Stokvis Tapes is able to slit tapes in the width you need. This way your tape is easier to use with less waste.

## **Spooling**

Spooled (bobbin wound) tapes are the solution for you when you want to reduce your production stops. Roll length up to 20.000 meters are possible to reduce your line stops to the minimum.



# Assembly of touchscreens and displays

#### **Application**

Our acrylic foams are excellent for structural mounting of control panels and other components made of glass, plastic or metal.

#### **Products**

High performance acrylic foam tape for structural bonding. This double-sided tape consists of an acrylic foam carrier and a pure acrylic UV cured adhesive. Bonds to a wide variety of substrates by flowing into the microscopic surface of materials which results in excellent adhesion and shear resistance. It has high resistance to ageing, temperature, humidity, water and UV light. Additionally, it features vibration dampening, shock absorption, sealing and thermal expansion.

It is used for various mounting/bonding applications like mounting of signs and graphics, replacement of mechanical fasteners and welds. It is also used for bonding of metal and glass.



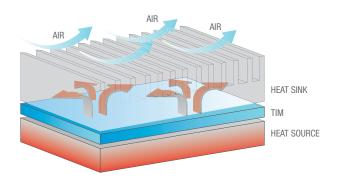
# Thermal managment

#### **Application**

We provide materials that selectively control hot spots and protect heat sensitive parts.

#### **Products**

Thermal Interface Materials (TIM). We supply highly thermal conductive and electrical insulating solutions. This comprehensive range of self-adhesive Thermal Interface Materials combines bonding of the heat source to the heat sink, enabling efficient cooling of the electronic components simultaneously. Besides excellent thermal conductivity these TIM's have good heat and weather resistance.





# Coils fixing and thermal control

#### **Application**

Stokvis aluminium and alu/PET tapes are able to fix cooling elements and manage the thermal control of different equipment.

#### **Products**

Self-wound tape is a single sided tape that can consist of an aluminium or an aluminium/PET carrier coated with a high-performance solvent acrylic adhesive. They are available in different thicknesses. Self-wound aluminium foil tape is easy to apply in the process, especially when automated. The aluminium backing provides excellent reflection of both heat and light. This conductive backing provides low moisture vapor transmission rate and excellent sealing and patching performance. This product is extra sustainable because there is no liner waste.



# Grounding and shielding of electromagnetic interface

#### **Application**

Stokvis supplies self-adhesive tapes coated with an electrically conductive acrylic adhesive for EMI/RFI shielding and static discharge applications. We have several carriers available like copper, copper plated PET fabric, PU grounding pads or nickel-copper based conductive foam.

#### **Products**

Self-adhesive single sided dead soft copper, also available with embossed copper foil, gives good conformability to substrates. It is solderable and resists oxidation and discoloration. The acrylic adhesive is highly conductive to ensure good conductive properties for prevention of static charge build-up.



Nickel-copper based conductive foams. Excellent combination of low compression with high shielding characteristics. These XYZ-axis electrically conductive acrylic foam pads conduct electricity through the thickness (Z-axis) and in the plane of the adhesive (X, Y planes). These features make them ideal for EMI/RFI shielding and as EMI/RFI gaskets to metal surfaces. Available in several thicknesses, with and without conductive self-adhesive.



# **Electrical insulation and flame retardancy**

## **Application**

ITW Formex® understands insulation safety needs and requirements as well as engineering design considerations in appliances

## **Products**

ITW Formex® These polypropylene and polycarbonate flame retardant materials provide superior electrical insulation and barrier materials for use in household appliances. It is also useful as a thermal and electrical barrier material which is reflected in its UL 94V-0 Flame Class Rating. The foldable insulating material is available in rolls and sheets, and it can be easily fabricated into a wide range of shapes.



## Air circulation and moisture control

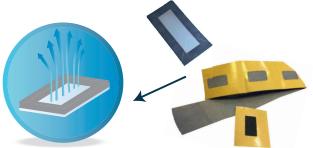
## **Application**

Our "venting tapes" allow air and moisture flow, trapped during the foaming process, avoiding foam leakage. Also very suitable for sealing electronic units against the ingress of liquids and particles, but which can still ventilate to prevent condensation, fogging, overheating and overpressure.

#### **Products**

Single-sided vent tape has a thin, conformable, porous, non-woven carrier that allows high air permeability, without tearing. The acrylic adhesive insures a good adhesion level. It is used in applications where there is a need for trapped air or moisture to be able to escape.

This high-quality filter material combines the protection against intrusion of dust and water with high ventilation properties. As you would expect from us as a converter, the vents can be tailor made to maximize your design flexibility.





We also have an economic version, a single-sided tape, consisting of a thin, conformable, porous, non-woven tissue carrier that allows high air permeability, without tearing. The acrylic adhesive insures a good adhesion level.

It is for example used as ventilation filter enabling trapped air or moisture to escape during foaming of doors and panels at white goods manufacturing.



# Sealing from dust, water and air

## **Application**

Our foam gaskets provide an excellent seal from external agents, perform acoustic absorption, reduce vibration and minimize shocks.

#### **Products**

Foam products are available as single- or double-sided self-adhesive foam tapes. Non-adhesive available also. These products come in divers foams like polyurethane, polyethylene and EPDM. You can choose from a broad range of thicknesses, densities, colors, open/closed cells etc to perfectly match your needs. These foams can be provided with different types of adhesive layers like modied acrylic or rubber adhesives. All have good tack, final adhesion and are compatible to low energy surfaces. These products absorb shocks and are conformable to irregular surfaces. The foam products can be customized on request like die cuts with easy to remove liners making it easy to apply. They are used for all shapes of die cut gasket applications in the appliance industry.





# Noise, vibration, harshness — NVH insulation

## **Application**

Stokvis Tapes proprietary branded substrates and adhesives are an ideal solution for noise, vibration and harshness reduction of industrial and home appliances.

#### **Products**

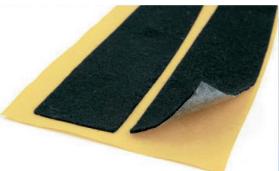
StokLite and StokPad are effective noise and vibration absorption solutions, used for acoustic management in the appliances market.

StokLite is an ultra-microfiber noise-absorbing material that features a layered construction: 100% polypropylene (PP) cover scrims on both sides, 55% PP ultra-microfibers, and 45% polyester staple.

This product is produced in thicknesses ranging from 12mm to 25mm.

StokPad comprises a range of sound-absorbing fleeces typically made from spunbond PP and thermally bonded PET. This product is produced in thicknesses ranging from 10mm to 20mm. These high performance, hydrophobic, self-extinguishing, low-weight, self-adhesive products are easy to convert and supplied in a variety of colors.

Thanks to their flexible structure, they can easily follow the shape of different surfaces and components. StokLite and StokPad have low emissions and also provide excellent solutions for anti-squeak, dust sealing and thermal insulation.







# Fixing of internal and external components

#### **Application**

We supply materials suitable for bonding on difficult low energy surfaces, for example to attach a logo, glass touch panel or plastic bracket to the appliance.

#### **Products**

For internal and external adhesive bonding our range of double-sided tapes is very comprehensive, you can choose from different carriers, adhesives and liners that will meet all your application needs.

Double coated tissue tape is a double sided tape that consists of a paper tissue carrier and a synthetic rubber adhesive. It shows a good balance between initial tack, peel adhesion and holding power. Being a rubber adhesive system, it also has good adhesion to low energy surfaces. Recommended for bonding different surfaces like stainless steel, HIPS and aluminium. This tape is widely used in refrigeration industry.

Double coated PET tape is a double sided tape that consists of a polyester film carrier and a solvent based modified acrylic adhesive. It has a very good resistance to ageing, humidity, water, temperatures, chemicals, solvents, weak acids and alkalis and UV light. It has very good adhesion and shear resistance to metal, glass, varnish and other high surface energy materials. It also has good adhesion and shear to low surface energy materials, and because of its high adhesive mass it is suitable for rough or structured surfaces. It is used for secure bonding in industrial appliances.



# Fixing of movable parts during transport

#### **Application**

Stokvis MOPP strapping tapes are ideally to secure movable parts during transport, handling and installation. Removable without any residues.



## **Products**

This tape consists of a mono-oriented polypropylene (MOPP) film carrier coated with a clean removable adhesive. It has good bonding strength and initial adhesion. This tape has a particularly high tensile strength in longitudinal direction. Its adhesive does not leave residues after removal. It is used for temporary but secure fixing of components like bins, drawers, shelves, and other adjustable appliance parts inside refrigerators and other household appliances during production, handling and transport. The blue colour makes it easy for the end user to recognize and remove the strapping tape before using the household appliance.



# **Surface protection**

## **Application**

Our protective tapes are able to preserve your product during transport and assembly

#### **Products**

Stokvis protective film tapes are highly formable and available with different backings like PE and PVC foils in many thicknesses. These self-adhesive products are used to protect various surfaces from mechanical impact and against dust and dirt during handling of appliances. Being clean removable and resistant to UV, chemicals, moisture and ageing make these self-adhesive foils suitable for protecting various household appliances during production, storage, transport and installation.



# **Steam protection**

## **Application**

This single-sided self-adhesive tape protects the underside of the worktop from moisture and steam coming, for example, out from the dishwasher or (steam) oven when opening.

## **Products**

The self-adhesive steam protective tape is applied between the dishwasher or (steam) oven and the underside of the worktop. The clear transparent film tape has high adhesive strength on common worktop materials and is resistant to steam, moisture, cleaning agents and contaminants such as grease.





Belgium
China
Denmark
Germany
Finland
France

Italy
Mexico
Netherlands
Norway
Poland
Portugal

Spain
Czech Republic
United Kingdom
United States of America
Sweden

# **STOKVIS TAPES BENELUX BV**

05/09/2023

# **Belgium**

Mechelsesteenweg 586C 1800 Vilvoorde Email: info@stokvistapes.be Tel. +32 (0)22 55 06 11

## **Netherlands**

Van Hennaertweg 10 2952CA Alblasserdam Email: info@stokvistapes.nl Tel. +31 (0)78 699 21 00

WWW.STOKVISTAPES.NL