

Oven, Cooktop & Exhaust Hood

Can you stand the heat? Adhesive solutions from Lohmann.





Your reliable partner for smart and safe bonding solutions for the Home Appliance Industry

We are at your side throughout the entire duration of your projects.

As a globally active company with regional locations we see ourselves as your partner. With our international team we are always close to you. Through individual suitability tests in our Bonding Arena®, our application engineers will find the right product for your requirements. In dialogue with you, we jointly create the design of adhesive solutions. These are then produced by our specialists at our own locations whether as die-cut parts, rolls or sheets. Your manufacturing process is the focus of attention.

We would be happy to provide you with additional support in integrating our bonding solution into your process -from simple applicators to complex concepts for your production line.

Good project and quality management are a matter of course for us.

We offer the entire value chain of double-sided adhesive tape production – from a single source.



R & D of adhesive









Assembly support

2

Coating

Converting

Die-cutting

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Home Appliances

Overview oven.



Home Appliances

Overview cooktop & exhaust hood.



Applications in detail

Oven – front panel

Printed electronics

With our thin, highly transparent transfer adhesive tapes, carrier films of the printed electronics can be laminated as well as directly bonded to the front panel over the entire surface. This ensures trouble-free functioning of the printed sensors.

Properties

- Highly transparent
- Acid-free
- Suitable for polycarbonate and PMMA
- Suitable for die-cutting
- Flexible

Display – Air Gap Bonding

Displays and display units are cleanly and securely attached to the inside of the device with our closed-cell foam tapes. Die-cut parts ensure an efficient processing procedure and protect the display from moisture. We take your design and requirements into account in the production process.

Properties

- Good compressibility
- Stable compression set over the long term
- Available in many thicknesses and densities
- High dimensional stability
- Suitable for manual and automatic processing

Display – OCA bonding

Displays with or without touch sensors are bonded securely and without air bubbles directly to the full surface of the front panel using our highly transparent transfer adhesive tapes. This enables unrestricted functionality of all display units as well as the touch sensors. Air bubbles can be removed subsequently with the help of an autoclave.

Properties

- Highly transparent
- Acid-free
- Suitable for polycarbonate and PMMA
- Suitable for die-cutting

Mechanical interfaces

For excellent fastening of front panels with cutouts for knobs, switches or displays, our foam adhesive tapes are particularly suitable as individual die-cut parts. In doing so, they fulfill several tasks at once: They seal against liquids, reduce vibrations and compensate for different thermal linear expansion of different materials.

- Good compressibility
- Stable compression set over the long term
- Available in many thicknesses and densities
- Good compensation properties of thermal linear expansion
- Suitable for manual and automatic processing











Oven – door

Glass plate spacers

The use of our double-sided foam adhesive tapes eliminates the usual curing times of conventional silicone adhesives. The production process is thus made more flexible and efficient. This significantly reduces the cycle time. Foam tapes enable a secure connection of the glass plate to the spacer and compensate for their different thermal linear expansion.

Properties

- High adhesion to ceramic coatings
- Good temperature and chemical resistance
- Available in various thicknesses
- Available as roll and die-cut

Metal holders for hinges

Our thermosetting epoxy adhesive films reliably bond the oven door to the door hinge mounts. They cure much faster than conventional silicone adhesive systems, which leads to an essential acceleration of the production process. In the uncured state, they are pressure-sensitive and thus easy to pre-apply. We adapt the dimensions of the adhesive film individually to the size of your component.

Properties

- Short curing time (approx. 10 min at 170°C)
- Preapplicable due to initial tack at room temperature
- High adhesion to glass, metal and ceramic coatings
- Extremely resistant to chemicals and temperature

Oven – decorative parts

Emblems

With our thin film and foam adhesive tapes, the most filigree emblems or letterings can be easily attached even to low-energy surfaces. We match the design of the die-cut parts to your individual assembly process - whether manual or automatic.

Properties

- High adhesion to a wide variety of surfaces
- Clean an precise application without slipping
- High chemical resistance to cleaning agents

Esthetic trims

The use of our foam adhesive tapes offers advantages for attaching decorative elements to the unit: They enable fast, clean and secure mounting, without slipping and curing times on the housing. Further mechanical fixings are not required.

- High resistance to temperature and chemicals
- High aging resistance
- Excellent compensation of thermal expansion
- High adhesion to glass and aluminum
- Available in black an white









Decorative front cover

Our thin, closed-cell foam adhesive tapes enable quick, clean and secure bonding of decorative front panels without slipping and curing times. Additional mechanical fixing is not necessary. We draw on our many years of expertise as one of the market leaders in mirror bonding in the furniture industry. Available as rolls, spools and die-cut parts.

Properties

- High adhesion to many coatings and surfaces
- Excellet automatic processability
- Available in various thicknesses and colors

Cooktop - induction unit

Ferritic magnets

Our double-sided foam tapes are the best choice for securely fixing ferritic magnets. They are characterized by very good temperature stability, chemical resistance as well as low emission values. The availability of the adhesive tape as a die-cut part on a roll guarantees good processing.

Properties

- High temperature resistan
- · Low emission at operating temperature of the device
- Available as die-cut, roll or spool

Splinter Protection

The high tensile strength and elongation at break of our single-sided film tapes increase the resistance of the glass to pressure, impact and shock. The high adhesive strength of the tape holds glass fragments together when broken, thus preventing injuries to the user and increasing product safety. Individual dimensions allow the size to be flexibly adjusted to your cooktop.

Properties

- Good adhesion to ceramic screen printing
- · High tensile strength and elongation at break
- Various dimensions available as roll or die-cut

Sensors

Sensors can be securely bonded to the circuit board using our closed-cell foam adhesive tapes. This enables an unrestricted function.

- Good temperature and chemical resistance
- High adhesion to ceramic screen printing and FR4 board materials
- Available as roll and die-cut









Exhaust hood & Cooktop – decorative parts

Emblems

With our thin film and foam adhesive tapes, the most filigree emblems or letterings can be easily attached even to low-energy surfaces. We match the design of the die-cut parts to your individual assembly process – whether manual or automatic.

Properties

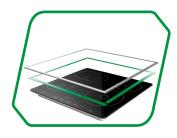
- High adhesion to a wide variety of surfaces
- Clean and precise application without slipping
- High chemical resistance to cleaning agents

Esthetic trims

The use of our foam adhesive tapes offers advantages for attaching decorative elements to the unit: They enable fast, clean and secure mounting, without slipping and curing times on the housing. Further mechanical fixings are not required.

- High temperature and chemical resistance
- High aging resistance
- Excellent compensation of thermal expansion
- High adhesion to glass and aluminum
- Available in black and white





Exhaust hood – front panel

Printed electronics

With our thin, highly transparent transfer adhesive tapes, carrier film of the printed electronics can be laminated as well as directly bonded to the front panel over the entire surface. This ensures trouble-free functioning of the printed sensors.

Properties

- Highly transparent
- Acid-free
- Suitable for polycarbonate and PMMA
- Suitable for die-cutting
- Flexible

Display – Air Gap Bonding

Displays and display units are cleanly and securely attached to the inside of the device with our closed-cell foam tapes. Die-cut parts ensure an efficient processing procedure and protect the display from moisture. We take your design and requirements into account in the production process.

Properties

- Good compressibility
- Stable compression set over the long term
- Available in many thicknesses and densities
- High dimensional stability
- Suitable for manual and automatic processing

Display – OCA bonding

Displays with or without touch sensors are bonded securely and free of air bubbles directly to the full surface of the cover glass using our highly transparent transfer adhesive tapes. This enables unrestricted functionality of all display units as well as the touch sensors. Air bubbles can be subsequently removed with the help of an autoclave.

Properties

- Highly transparent
- Acid-free
- Suitable for polycarbonate and PMMA
- Suitable for die-cutting

Mechanical interfaces

For excellent fastening of front panels with cutouts for knobs, switches or displays, our foam adhesive tapes are particularly suitable as individual die-cut parts. In doing so, they fulfill several tasks at once: They seal against liquids, reduce vibrations and compensate for different thermal linear expansion of various materials.

- Good compressibility
- Constant restoring force of the long term
- Available in many thicknesses and densities
- Good compensation properties of thermal linear expansion









Exhaust hood – housing

Reinforcement / NVH

Profiles are usually inserted internally in stainless steel exhaust hoods for reinforcement and vibration damping. These can be bonded securely and quickly without curing time using our double-sided foam tapes. As roll goods in various widths, our adhesive tapes can be pre-applied to your profiles without any problems.

Properties

- High adhesion to steel, ABS and ceramic coatings
- Excellent compensation of different thermal expansion coefficients
- Rolls available in various widths

Metal holders for hinges

Our thermosetting epoxy adhesive films reliably bond the exhaust hood flap to the door hinge mounts. They cure much faster than conventional silicone adhesive systems, which leads to an essential acceleration of the production process. In their uncured state, they are pressure-sensitive and thus easy to pre-apply. We adapt the dimensions of the adhesive film individually to the size of your component.

- Short curing time (approx. 10 min at 170°C)
- Preapplicable due to initial tack at room temperature
- Very high adhesion to glass, metal an ceramic coatings
- Extremely chemical and temperature resistant
- Suitable for manual and automatic processing





Some like it hot

Lohmann's high-end adhesive solutions for electronics in home appliances.

Hardly any other industry is developing so rapidly and confronting manufacturers with such complex and diverse requirements as the consumer goods and electronics industry. In addition to size, shape and performance, design plays an increasingly important role. Moreover, appliances are becoming increasingly "intelligent"; large LCD and TFT screens can also be found in ovens, refrigerators and other household appliances. This is where Lohmann comes into play. Our innovative adhesive bonds are the solution for individual and innovative design ideas of our customers. Our products are true multitalents that combine a wide range of functions.

For example, our high-end adhesive tapes enable transparent and ultrathin bonds, efficient seals and insulation possibilities. We also have the right products for thermally and electrically conductive applications.

But we're not just hot:

The Bonding Engineers are also well equipped to meet other requirements in the household appliance industry. Learn more about our bonding solutions in the areas of "Cooling" and "Dish & Wash" and visit our microsite: <u>https://www.electronics-tapes.com/en</u>



The search is over:

In the Product-Navigator on our homepage you can inform yourself about our portfolio of established and permanently available standard products. Simply filter our "Lohmann classics" by adhesive, liner and desired function and find the perfect product for your application. https://www.lohmann-tapes.com/product-navigator



