

tesa® Tapes for Sealing and Damping Applications

## **OUR FOAM TAPES**

### For Ensuring a Reliable Seal, Time and Time Again

tesa is a global leader in the manufacturing of adhesive solutions. With over 125 years of experience and a footprint in over 100 countries, tesa has a long standing history of delivering German engineered quality in each and every product. Our long history of success is based on more than just innovative ideas, quality and technological progress. Influential factors also include taking responsibility for people and the environment, with our goal to protect ecological resources and to practice social responsibility in order to have a positive influence on the society in which we live.

### tesa® Adhesive Foam Tapes

tesa® Adhesive Foam Tapes are designed for a variety of sealing and damping applications, and are widely used across many industries.

Our foam tape can be used to seal out moisture, dust, draughts, fumes, light and insects, eliminate or reduce noise and vibration, provide impact resistance, cushioning and protection, or even dissipate stress on various assembled components.

Our comprehensive range has been designed to solve even the most challenging applications, with solutions that offer various features including high conformability, abrasion resistance, extreme environmental resistance and petrochemical resistance.

On top of this, our range includes options that are certified to meet many global and industry standards across flame retardancy, food and water compatibility.



# tesa® FOAM TAPE

### **Solutions for Sealing and Damping Applications**

Find out more on our range of adhesive backed foam tapes.



### tesa® 749 Series PE Foam Tape

### Cost Effective Permanent Sealing Solution

For a permanent fixed seal, where variations in compression will not take place such as opening and closing the seal. Constructed with a PE foam backing and an acrylic adhesive, tesa® 749 Series offers consistent quality.



#### tesa® 601 Series PVC Foam Tape

### Highly Conformable Foam for Rough & Uneven Surfaces

When it comes to sealing uneven surfaces such as corrugations, a highly conformable foam is required to compensate and fill varying gaps. tesa® 601 Series soft PVC foam offers superior conformability for a reliable seal.



### tesa® 5060 Series PVC/Nitrile Foam Tape

### Abrasion Resistant Foam for Long Term Durability

Creating a seal in applications where rough or sharp contact will occur requires a durable solution. tesa® 5060 Series skinned PVC/Nitrile foam creates an abrasion and tear resistant barrier for long term performance.



#### tesa® 6110 Series EPDM Foam Tape

### High-Performance Foam for Extreme Environments

Environmental conditions can be a real challenge for sealing applications. With resistance to high-temperatures, UV, ozone and weathering, tesa® 6110 Series foam is designed for even the most challenging environments.



### tesa® 6111 Series Neoprene Foam Tape

### Petrochemical Resistant Foam

Creating a reliable seal in applications where contact with oils and other petrochemicals will occur requires a resistant foam. tesa® 6111 Series foam offers reliable performance, even when exposed to petrochemicals.



Attribute	Value
Backing Material	Irradiation cross-linked closed cell PE
Colours	Grey and white
Adhesive Type	Acrylic
Tape Thicknesses	7492 - 3mm 7496 - 5mm 7493 - 6mm 7494 - 10mm 7495 - 12mm
Tape Widths Available	6mm to 1220mm



Attribute	Value	Testing Standard/Information
Nominal Density	33kg/M3	DIN 53420
Hardness Shore		
Compression Strength	7N/cm2	DIN 53577
Unyielding Deformation	23%	DIN 53572
Water Tightness	100%	< 10% compression
Water Absorption after 2 hours	0.7% (Vol) after 7 days 0.8% (Vol) after 28 days	DIN 53428
Tensile Strength	2.9N//25mm per mm thickness	DIN 53571
Tear Resistance	2.9N/mm	DIN 53575
Elongation at Break	175%	DIN 53571
Thermal Conductivity	0.25btu/in	Sq.ft(hr)Deg. F
Service Temperature	-80°C to 80°C	
Flame Retardancy	All thicknesses in 6mm and greater are flame retardant	FMVSS 302*

## tesa® 749 PE

### **Cost Effective Permanent Sealing Solution**



### **Product Description**

tesa® 749 Series foam tape consists of a closed cell polyethylene foam backing with an acrylic adhesive on one side. The foam is irradiation cross-linked to ensure consistent high-quality. The closed cell PE foam makes it suitable for sealing out dust and water, while the acrylic adhesive allows for easy application to various surface materials.

tesa® 749 Series PE foam tape is soft and conformable, and suitable for use on uneven surfaces. The foam tape is REACH, RoHS and FDA approved, non-toxic when burnt, non-carcinogenic and will not contaminate food or water.

### **Product Features**

- · Balance of cost-effective PE backing without compromising on quality
- Resistant to weathering, ageing and fungi
- High-tack acrylic adhesive offers a permanent bond
- Food and water compatible
- · Resistant to oil, petrol, solvents and may chemicals

### **Applications**

tesa® 749 Series foam tape is a cost effective solution for a variety of permanent sealing applications in the concreting and general industrial market.

- Dam wall sealing (concreting)
- Draught and water sealing
- Sealing concrete form work
- Sealing electrical enclosures
- Sealing between the canopy and tray in recreational vehicle

- Food and water compatible (FDA approval number CFR 178.3010)
- REACH & RoHS Compliant







Attribute	Value	
Backing Material	Soft PVC closed cell foam	
Colours	Black and grey	
Adhesive Type	Acrylic	
Tape Thicknesses	60103 - 3.2mm 60105 - 4.8mm (black only) 60106 - 6.4mm 60109 - 9.5mm 60112 - 12.7mm 60119 - 19mm (black only)	
Tape Widths Available	6mm to 1220mm	



Attribute	Value	Testing Standard/Information
Adhesive Power	15N/25mm (black) 7N/25mm (grey)	
Nominal Density	110kg/M3 (black) 130 kg/M3 (grey)	ASTM D - 1667
Hardness Shore 00	21 (black) 25 (grey)	ASTM D - 1667
Force to Compress 25%	0.176kg/cm2 (black) 0.246 kg/cm2 (grey)	ASTM D - 1667
Compression Set 30% (% loss from original height)	4% (black), 5% (grey)	ASTM D - 1667
Water Tightness	100% at 50% compression	
100% at 40% compression (grey)	2.9N//25mm per mm thickness	DIN 53571
Water Absorption (vol% - MTP)	1.1% (black) 1.0% (grey)	
Tensile Strength	1.75kg/cm2 (black) 2.10kg/cm2 (grey)	ASTM D - 412
Elongation at Break	150%	ASTM D - 412
Thermal Conductivity (Sq.ft(hr) Deg. F)	0.27btu/in	ASTM C - 518
Temperature Resistance	-40°C to 80°C	Service Temperature

# tesa® 601 PVC

### **Highly Conformable PVC Foam for Rough & Uneven Surfaces**

### **Product Description**

tesa® 601 Series foam tape consists of a closed cell polyvinyl chloride (PVC) foam backing with an acrylic adhesive on one side. The closed cell foam can create a waterproof barrier when compressed, while the soft grade PVC foam is flexible and conformable to help seal uneven surfaces. Even after long periods of holding heavy weight, it will rapidly return to its original state.

The PVC foam tape is resistant to UV, ozone, oxidation and fungi. The black foam tape version is flame retardant to FMVSS 302, making it suitable for use in the automotive industry.

### **Product Features**

- The highly conformable PVC backing is available in a range of thicknesses and allows for rough and uneven surfaces including corrugated sheeting to be effectively sealed
- Resistant to UV, ozone, oxidation and fungi
- Low compression set means that after long periods of compression the foam rebounds to its original state

### **Applications**

tesa® 601 Series foam tape is a highly effective sealing solution across many rough and uneven surfaces due to its highly conformable backing, and is widely used in applications including:

- Sealing panels on portable buildings and caravan panels
- Dam wall sealing (concreting)
- Draft and water sealing
- · Vibration damping and sound reduction on aluminium boat hulls
- Vibration damping on automotive weather shields

- Flame Retardant to FMVSS 302 (black version only)
- REACH & RoHS Compliant







Attribute	Value
Backing Material	Closed cell PVC/Nitrile Foam
Colours	Black
Adhesive Type	Acrylic
Tape Thicknesses	50601 - 3mm 50602 - 6mm 50603 - 9mm 50604 - 12mm
Tape Widths Available	6mm to 1220mm



Attribute	Value	Testing Standard/Information
Adhesive Power	6N/25mm	
Foam Density	91kg/M3	
Elongation	100%	
Tensile Strength	73.5N/25mm	
Temperature Resistance	-10°C to 80°C	
Thermal Conductivity	0.27btu/in	
Flammability	Flame retardant and self-extinguishing	ASTM D 1692-73
Water Tightness	100% at < 10% compression	
Water Absorption	6% (by weight)	ASTM D1056-73

## tesa® 5060 PVC/NITRILE

### **Abrasion Resistant Foam for Long Term Durability**



### **Product Description**

tesa® 5060 Series foam tape consists of a closed cell skinned PVC nitrile foam backing with an acrylic adhesive on one side. The 'skinned' foam creates an abrasion resistant layer, which is particularly suited where contact with sharp or rough surfaces will occur such as in enclosure doors.

The durable and robust foam is resistant to abrasion and tearing, along with weathering, making it suitable for applications both indoors and outdoors.

### **Product Features**

- Resistant to abrasion and tearing
- Resistant to weathering
- Flame retardant
- · Low compression set means that after long periods of compression the foam rebounds to its original state
- Electrically non-conductive can be used as an electrolysis barrier
- Good thermal insulation properties

### **Applications**

tesa® 5060 Series foam tape is a durable sealing solution, designed for applications where sharp or rough contact will occur, including:

- Sealing electrical enclosures and switch cabinets
- Sealing industrial access doors and hatches
- Sealing hatches on boats
- Sealing externally mounted air conditioning equipment

- Flame retardant to FMVSS 302, UL94-5VA, 5VB, HF-1, V0 and self-extinguishing
- REACH & RoHS Compliant







Attribute	Value
Backing Material	Closed cell EPDM rubber
Colours	Black
Adhesive Type	Acrylic
Tape Thicknesses	61101 – 1.6mm 61102 – 3.2mm 61103 – 4.8mm 61104 – 6.4mm 61105 – 9.5mm 61106 – 12.7mm 61107 – 19.0mm
Tape Widths Available	6mm to 1331mm



Attribute	Value	Testing Standard/Information
Adhesive Power	30N/25mm	
Foam Density	120kg/M3 Ave	ASTM D - 1667
Force to Compress	0.245kg/cm2 Ave	ASTM D - 1667
Compression Set	7%	ASTM D - 1667
Hardness Shore 00	37 Ave	
Tensile Strength	5.6kg/cm2	
Elongation	175%	
Temperature Resistance	-40°C to 105°C continuous	
120°C intermittent	6% (by weight)	ASTM D1056-73
Thermal Conductivity	0.30btu/in	
Flame Retardancy	Complies with FMVSS 302	
Water Tightness	100% at < 10% compression	
UV & Ozone Resistance	Excellent	

## tesa® 6110 EPDM

### **High-Performance Foam for Extreme Environments**



### **Product Description**

tesa $^{\circ}$  6110 Series high-performance foam tape consists of a closed cell EPDM rubber backing with an acrylic adhesive on one side. The foam offers high temperature resistance (-40 $^{\circ}$ C to 105 $^{\circ}$ C) as well as excellent resistance to UV light, ozone and weathering, making it ideal for even the most challenging outdoor applications.

tesa® 61101 is FDA approved (non-toxic & non-carcinogenic) and will not contaminate drinking water. It complies with automotive industry standards, is compatible with plastics and is flame retardant to FMVSS 302.

### **Product Features**

- Excellent resistant to UV, ozone and weathering
- High temperature resistance (-40°C to 105°C)
- Flame retardant
- · Electrically non-conductive can be used as an electrolysis barrier
- Compatible with silicones and plastics

### **Applications**

tesa® 6110 Series foam tape is ideal for even the most challenging applications where exposure to harsh environmental conditions will occur, including:

- Sealing electrical enclosures and switch cabinets
- Sealing exterior and interior lighting
- · Sealing industrial access doors and hatches
- Sealing domestic and commercial glazing systems
- Sealing externally mounted air conditioning equipment

- Flame retardant to FMVSS 302
- FDA approved to section 177.26 (non-poisonous, non-carcinogenic)
- REACH & RoHS Compliant







Attribute	Value
Backing Material	Closed cell neoprene rubber
Colours	Black
Adhesive Type	Rubber
Interliner Type	61111 – 1.6mm 61112 – 3.2mm 61113 – 4.8mm 61114 – 6.4mm 61115 – 9.5mm 61116 – 12.7mm
Tape Widths Available	6mm to 1033mm



Attribute	Value	Testing Standard/Information
Adhesive Power	30N/25mm	
Foam Density	100kg/M3 Ave	
Force to Compress	0.245kg/cm2 Ave	ASTM D - 1667
Compression Set	9%	ASTM D - 1667
Hardness Shore 00	37 Ave	
Tensile Strength	4.2kg/cm2	
Elongation	175%	
Temperature Resistance	-40°C to 70°C continuous	
Thermal Conductivity	0.30btu/in	
Flame Retardancy	Complies with FMVSS 302	
Water Tightness	100% at < 10% compression	
Ozone Resistance	Good	
UV Resistance	Good	

## tesa® 6111 NEOPRENE

### **Petrochemical Resistant Foam**



### **Product Description**

tesa® 6111 Series foam tape consists of a closed cell neoprene rubber backing with a natural rubber adhesive on one side. The foam tape offers outstanding resistance to oils and other petrochemicals, while also flame retardant and resistant to weathering.

tesa® 6111 Series foam tape creates an electrolysis barrier between different metals, making it well suited for enclosure type applications, particularly where contact with oil and petrol will occur.

### **Product Features**

- Excellent resistance to petrol and oil
- · Resistant to weathering and suitable for outdoor use
- Flame retardant
- · Electrically non-conductive can be used as an electrolysis barrier
- Compatible with plastics
- Suitable for die-cutting due to its dimensional stability

### **Applications**

tesa® 6111 Series foam tape is well-suited for sealing in transport applications due to its excellent resistance to petrol and oil. The product is commonly used in sealing applications in trucks, buses, special-purpose vehicles, boats, yachts and caravans. Applications include:

- Sealing engine bays where contact with oil can occur
- Sealing access panel doors in machinery and transportation vehicles
- Sealing electrical enclosures and switch cabinets
- Sealing hatches on boats and yachts
- · Sealing industrial access doors and hatches

- Flame retardant to FMVSS 302
- REACH & RoHS Compliant







### **Concreting Industry**

tesa foam tapes are used to seal on-site form work and complex precast moulds. The tapes provide a water barrier to prevent moisture leakage and impart a clean edge to the concrete. Double-sided tesa foam tapes also provide a quick and accurate method of attaching accessories (for example ferrules and plastic fillets) to mould concrete faces.

### **Recommended Products**

- tesa® 476 Series Urethane Foam (Open cell)
- tesa® 601 Series PVC Foam (Closed cell)



### **Glazing Industry**

Both domestic and commercial window systems can be sealed with tesa foam glazing tapes. The wide range of thicknesses from 1.6mm to 19.0mm are suitable for sealing most glass and frame combinations. tesa foam tapes can also be die-cut and used as a convenient way to seal the corners of fabricated aluminium window frames.

#### **Recommended Products**

- tesa® 602 Series PVC Foam (Single-sided)
- tesa® 604 Series PVC Foam (Double-sided)



### **Cladding and Façade Industry**

The range of tesa tapes used in cladding and façade applications include foam tapes for sealing behind various types of wall cladding, thick insulation tape for the prevention of electrolysis between dissimilar metals and foam tapes for noise reduction under roofing sheets.

### **Recommended Products**

• tesa® 6110 Series EPDM Foam (Closed cell)



### **Interior Fitout Industry**

tesa foam tapes are an ideal sealing solution across the interior fitout industry and are widely used for sealing from dust and water, along with noise damping in office, commercial and retail spaces.

### **Recommended Products**

- tesa® 476 Series Urethane Foam (Open Cell)
- tesa® 749 Series PE Foam (Closed cell)
- tesa® 5060 Series PVC/Nitrile Foam (Closed cell)

## **BUILDING INDUSTRY**

### **Our Adhesive Foam Tape Solutions**



tesa® 476 Series

#### tesa® 476 Series Polyurethane Foam Tape

Product description and application

Single-sided open cell foam tape with an acrylic adhesive on one side. The foam is ideal for sealing from dust and draft, adheres easily on many substrates and is conformable for use on rough or uneven surfaces. Widely used in the concreting industry due to its ability to seal on-site form work and complex precast

Application Ideas: Dam wall sealing in concreting industry, sealing concrete form work and precast moulds, general dust and draft seal in interior fitout industry, noise damping in office partitions.







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### Product description and application

#### tesa® 602 Series PVC Foam Tape (Single-sided)

Single-sided closed cell foam tape with an acrylic adhesive on one side. Widely used in the glazing industry due to its highly conformable structure, and ability to seal most window glass and frame combinations. Resistant to UV, ozone, oxidation and fungi making it well suited for outdoor applications. Silicone compatible and available in customised die cuts.

Application Ideas: sealing between glass and aluminium in windows and the corners of aluminium window frames.

Backing	PVC
Foam structure	Closed cell
Adhesive	Acrylic
Colour	Grey
Water tightness (100%)	30% compression
Density	180 KG/m3
Outdoor resistance	UV, Ozone, Oxidation

Technical information

-35°C to 90°C Temperature resistance 1.6, 3.2, 4.0, 6.4, 9.5, Available thicknesses 12.7 mm







#### Product description and application

#### tesa® 604 Series PVC Glazing Foam Tape (Double-sided)

Double-sided closed cell foam tape with an acrylic adhesive on both sides for glazing applications. The high density foam has excellent resistance to water penetration. while still being flexible enough to seal uneven surfaces. Resistant to UV, ozone, oxidation and fungi making it well suited for outdoor applications. Available in customised die cuts.

Application Ideas: Used as a primary seal between the glass and metal frame in commercial and domestic windows and window walls.

#### Technical information

#### Backing PVC Closed cell Foam structure Adhesive Acrylic Colour Black Water tightness (100%) <10% compression Density 254 KG/m3 Outdoor resistance UV. Ozone, Oxidation -35°C to 90°C Temperature resistance Available thicknesses 1.6, 3.2, 4.8, 6.4 mm

#### Application Ideas











Our management system is certified according to the standards ISO 9001, ISO/TS 16949, and ISO 14001.

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. Therefore, the user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical support staff will be glad to support you.

For more information on our industry solutions, visit our website www.tesa.com

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