

# VITO Products for the industrial production

VITO Irmen GmbH & Co. KG, based in Remagen, Germany, is a manufacturer of single- and double-sided adhesive tape solutions for a wide range of applications: sealing, damping, protecting, storing, assembling and insulating. You can rely on the high quality of our products.

Our individual solutions support our partners in the industrial sector and help to optimize their processes and to improve their products. Why don't you also benefit from the reliable quality of our adhesive products and system solutions for the industry? Our experience and our knowhow can be found in every single product. VITO helps you to make your production processes more efficient and to increase the quality of your performance.

To learn more, please visit our website:

www.vito-irmen.de











Transfer adhesive films

Double-sided adhesive

foam tapes

## It sticks and it holds, without laying on pretty thick

## VITOCOLL transfer adhesive films

VITOCOLL transfer adhesive films are used for the adhesion and lamination of materials such as metals, plastics, glass and paper. In addition, for the adhesion of signs, set forms, labels, emblems, badges, decorative battens and front panels, profiles, scanner rails, pipe insulation, woven fabrics and cable ducts.

The very thin adhesive films (0,07 up to 0,25 mm) permit the adhesion of thin materials without substantially influencing the total concept. Unlike pure adhesive films, adhesive films with a support allow two different sides: strong and low tack adhesive. Available adhesive types are: pure acrylic, modified acrylate and rubber-based.

Due to the different chemical compositions, the diverse adhesives fulfil different technical demands.







VITOCOLL 342 E 08

VITOCOLL 538 B 09

VITOCOLL 132 A 07

VITOCOLL 242 B 14

Bonding of insulation material for heating and ventilation systems (fire-retardant)

Manufacture of objects that can be removed without leaving residues, for indoor and outdoor Bonding of signs, emblems and faceplates for indoor and outdoor applications.

Bonding of PU foams, leather and technical textiles



		applications	High breaking elongation		
Adhesive system	acrylic dispersion	pure / modified acrylic	pure acrylic	modified acrylic	
Carrier	tissue	polyester film 15 µm	none	polyester film 15 µm	
Total thickness ( mm)	0,08	0,09	0,07	0,185	
Protective covering	siliconized film, blue	siliconized PE-paper, white	siliconized paper, white	siliconized paper, white	
Temperature resistance in °C	80	90	> 150	80	
Shear strength in N / 6,25 mm	10	15	60	15	
Water resistance	3	1	1	1	
Initial adhesive strength (tack)	1	each side with different adhesive strength	2	1	
Ageing, weathering, UV resistance	2	1	1	1	
Chemical resistance	2	2	1	2	

# Double-sided adhesive foam tapes

Wherever different surfaces are to be bonded by means of foam tape, this is a job for the VITOMOUNT series.

## VITOMOUNT

	<b>VITOMOUNT</b> 125 S - 30 FBL 2	<b>VITOMOUNT</b> 125 - 70	VITOMOUNT 125 SS - 30	VITOMOUNT 125 SSC - 70	<b>VITOMOUNT</b> 125 SO - 70	VITOMOUNT 125 SS - 70	<b>VITOMOUNT</b> 125 SS - 100	VITOMOUNT 125 SSPR - 70	<b>VITOMOUNT</b> 125 SD - 70 H	<b>VITOMOUNT</b> 125 SA - 220	<b>VITOMOUNT</b> 125 - 201 RP	VITOMOUNT Glazingmount 400	VITOMOUNT DG 75 FBL 2
carrier	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE
thickness in mm	2,0 up to 4,0	1,0 and 1,6	2,0 and 3,0	1,0	1,0 and 1,6	1,0 and 1,6	0,8	1,0 and 1,6	1,0 and 1,6	0,8	0,8	3,2 up to 8,0	2,0
colour	white	white	white	white	white	white	white	white	white	black	black	anthracite	black
adhesive (see legend below)	DA	DA	LRA	UV-A	LA	LRA	LRA	LRA	SK-HM	LRA	LRA	LRA	LRA
siliconized paper		white		brown		brown			white		white		
siliconized PO-film	green		green		green	green	green	green		green			blue
non-siliconized PO-film												blue	
siliconized PET-film													
Initial adhhesion (immediate)	1	1	2	1	1	2	2	2	1	3	3	2	2
final adhesion (after 24 h)	1	1	1	1	1	1	1	1	1	1	1	1	1
shear resistance	3	3	3	3	2	1	1	1	2	1	1	2	1
outdoor application			•	•		•	•	•		•	•	•	•
application at low temperatures	•	•	•	•									
temperature range from / to °C	-40 / 70	-40 / 70	-40 / 70	-40 / 80	-40 / 70	-40 / 100	-40 / 100	-40 / 100	-40 / 70	-40 / 90	-40 / 90	-40 / 80	-40 / 100
metal	•	•	-	-	•	•	•	•	•	•	•	•	•
glass	•	•	•		•	•	•	•	•	•	•	•	
ceramics	•	•		•	•	•	•	-	•				
acrylic glass / polycarbonate			•		•	•	•	•	•	•	•	•	•
hard PVC	•	•	-	•	•	•	•	•	•	•	•	•	•
soft PVC						•	•	•		•	•	•	•
ABS	•	•	-	•	•	•	•	•	•	•	•	•	•
wood / cardboard	•	•			•								
low energy surfaces (PP / PE / PA)	•	•		•					•				
fixing and assembly aid		•	-		•			-	•				•
fixing of wall hooks, profiles, plates, tags		•			•	•	•	•	•	•	•		- 6
fixing of scanner rails				•									9
mounting of wooden window bar profiles prior to final sealing	•												-
mounting of PVC bar profiles on glass													-
mounting mirrors in humid rooms						•	•						0
mounting mirrors on furniture						•	•		•				
mounting furniture decoration strips							•	•					
mounting of trims and emblems (automotive)										•			
fixing of spectacle lenses for grinding											-		
photovoltaic applications													•
structural glazing												•	•
heat lamination of EPDM rubber profiles and permanent bonding to flat surfaces													











Please ask for our double-sided self-adhesive foam tapes sample card free of charge!

# The allrounder for solid mountings

### **VITOCRYL**

Vitocryl is a high performance double-sided selfadhesive tape made of acrylic foam.

VITOCRYL was developed for the automotive industry and offers excellent performance characteristics on automotive plastics and on painted steel. Other applications include sign making, the automotive accessory market and the building industry.

- High load bearing capacity, excellent peel strength
  - Unlike screws, nuts and bolts, there is no material fatigue and no mechanical loss of quality
    - Compared to other adhesive connections, less work time is required, as well as less time for reworking and cleaning.
      - An alternative to spot welding, without distortion of the sheet metal. In addition, there are no weld beads that have to be ground off.

### Automotive industry

Fastening of

- exterior and interior trims
- badges and emblems
- spoilers
- rear view mirrors
- lighting elements
- various decorative elements such as wheel arch trim strips
- plastic floor protection strips
- rain sensors

### **Buses and trucks**

Fastening of

- roof and side planking to the frame construction
- roof windows
- interior linings
- steps
- badges and emblems
- air grids
- · floor trim strips
- · reinforcement profiles in refrigerated trucks

### Electronics

Fastening of

- electronic components such as batteries etc.
- · integrated circuits
- ribbon cables
- components in mobile telephones and telecommunication equipment
- · LCD displays
- · components in household appliances
- · LCD-PDP screens in frames
- distribution boxes

### Signs

Fastening of

- sign boards on stiffening elements
- transparent polycarbonate for illuminated signs
- single letters
- lighting elements in emergency signs

### Plastics

- piping insulations and coverings in air conditioning, heating and ventilation systems
- · interior trim on dashboards
- · machine housings and equipment cabinets

# Perfect sealing of pipes, containers and housings

### Self-adhesive sealing tapes

VITOLEN 111

ting purposes.

properties

It is used as a glazing tape and in

general for sealing and insula-

· Quick application without

Very good adhesion on

Very good thermal insulation

The closed-cell foam hardly

removal of a liner

different surfaces

absorbs humidity

Temperature resistance

2 - 6 mm / 8 and 10 mm

-40°C to 50°C

-40°C to 90°C

Thickness

Save time and benefit from our self-adhesive sealing tapes in heating-, ventilation and air conditioning installations, for the sealing of pipes, containers and housings

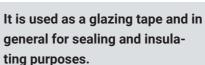
We manufacture and supply adhesive tapes for the sealing of various types of pipes, containers and housings, according to your specific requirements. All of

these products offer both high initial and final adhesion to different substrates such as plastics, metals or coated surfaces, without having to respect any pot life or waiting times.

The different expansivities of the materials put together are compensated by the tape, and the flexible foams seal reliably against dust and air.



### VITOLEN 120



- With protective liner (PO-Film)
- Very good adhesion on different surfaces
  - Very good thermal insulation properties
  - The closed-cell foam hardly absorbs humidity

## Temperature resistance

-40°C to 50°C -40°C to 90°C

Thickness

2 - 6 mm / 8 and 10 mm



VITOSEAL 100 PW / S005

### VITOSEAL 100 PW is used for sealing and dampening, for interior and exterior use.

- the elastic properties of the foam provide a very good adaptation to many different surfaces
- the "quick roll"-product design enables an easy application without overstretching
- good resistance against UV radiation
- with the adhesive layer towards the inside, without protective liner

Temperature resistance -30°C to 60°C

Thickness PW 3, 4, 5, 6, 8 and 10 mm

Thickness S005 15, 20 und 25 mm (with covered adhesive layer)











## Reliable sealing and insulation

**VITOMINIUM / VITOKUPFER** 



### VITOMINIUM Pure Aluminum Film

## One-sided adhesive pure aluminum film for indoor and outdoor applications

VITOMINIUM adhesive tapes are one-sided self-adhesive, electrically conductive pure aluminum foils for indoor and outdoor applications. VITOMINIUM is available as a roll (max. 1000 mm wide) or as a die-cut (max. 550 mm wide)

### **Applications:**

- Air conditioning, refrigeration, ventilation system construction
  Insulation of pipes and housings, sealing of ducts, steam and humidity barriers
- **Lighting**Inning of heat and light reflectors
- Building insulation, prefabricated construction and building elements

Sealing of flat roof elements, covering of joints in aluminum-laminated insulation systems, vapour and moisture barriers, edge bonding of laminated panels, sealing of joints of doublewall polycarbonate panels

Manufacture of containers

Seawater-proof lining and masking of special packaging and containers

Thickness

10

50 μm / 100 μm

### Available widths

6 - 1.000 mm (useable width max. 960 mm)



### VITOKUPFER 620

## Single-sided adhesive copper film for indoor and outdoor applications

- good adhesive strength on many surfaces
- · high initial adhesion (tack)
- · very good soldering capacity
- · electroconductive
- heat conductive

VITOKUPFER 620 is used in electrical engineering for EMC\* compliant production, in particular switches and alarm devices. The product is also used as a screening device in high-frequency technology and to derive static charge.

### Thickness

 $35 \, \mu m / 100 \, \mu m$ 

### Available widths

6 - 1.000 mm (useable width max. 960 mm)

### \* Electromagnetic compatibility

## Protects, dampens, insulates and stands firm

## VITO cellular rubber tapes

## VITOFLEX CM-L is used for protection, dampening, insulating and sealing

- very good ageing and ozone resistance
- good resistance against chemicals
- water-tight due to closed-cell structure
- · excellent weathering resistance
- high temperature resistance (-40°C to 120°C)
- good conformability

These characteristics allow for example the application as sealant in the air conditioning and ventilation sector, insulation for air conditioning units, and absorption of shocks.

VITOFEX CM-L is a one-sided self-adhesive, flexible cellular rubber with a closed-cell structure, based on EPDM (Ethylene Propylene Diene Rubber). It is resistant against many acids and alkalies in usual concentrations, water and water vapour up to 100°C, seawater, potassium and sodium compounds (for example com-

potassium and sodium compounds (for example common salt solution), alum in aqueous solution, cleaning agents, photo chemicals, cold ammoniac, acetylene, alcohols, glycerine, brake fluids and antifreeze fluids based on glycol, carbonic acid, ozone, silicone oil and

grease, chloride of lime in aqueous solution, wet and dry chlorine gas, hot ammoniac and hydrochloric acid.





AND INSULATION

SEALING











# GLAZING DRY

## Protection against breakage and fire

### **VITOMINIUM PET 230**

### High-quality, self-adhesive edge protection tape for insulation and fire protection glass

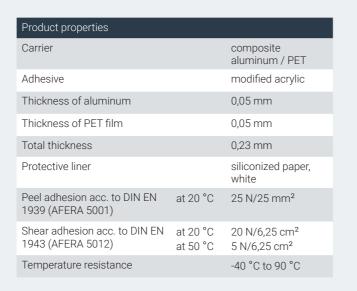
VITOMINIUM PET 230 is a sealing tape made of a combination of aluminum and polyester.

It serves the sealing and protection of sensitive components and surfaces, as a diffusion barrier against humidity and heat, to cover connections and but joints in the manufacture of solar modules, as well as in heating and ventilation systems.

Due to its flexible and high-quality acrylate adhesive, VITOMINIUM PET 230 can be easily applied on even as well as rough surfaces.

- · high adherence on glass, metal and PVC
- · High initial tack
- Vapourtight
- Excellent mechanical stability
- UV resistant





Product properties		
Thickness		1,6 mm
Colour		black
Peel adhesion on steel acc. to DIN EN 1939: 1996	at 20 °C	26 N / 25 mm
Shear adhesion on steel acc. to DIN EN 1943:1996	at 20 °C	60 N / 625 mm <sup>2</sup>
Thermal conductivity ISO 8301	at 10 °C at 20 °C	0,038 W/m² K 0,041 W/m² K
Temperature resistance		-40 °C to 100 °C
Processing temperature		15 °C to 30 °C

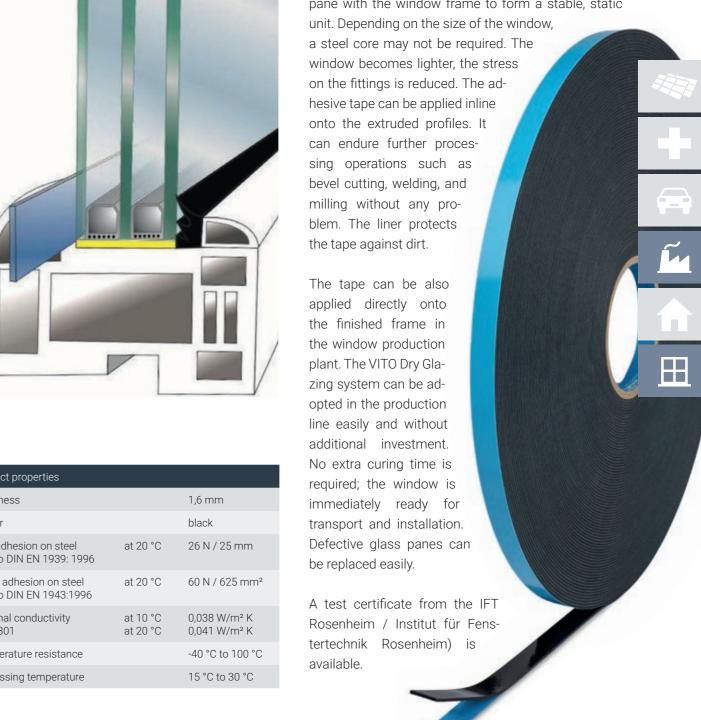
## Things to know about dry glazing

### VITOMOUNT 125 DG 75 FBL2

Putting an end to glazing spacers and wet bonding: Benefit from the advantages of the VITO dry glazing of insulation glass windows.

The adhesive tape is applied to the frame profile. The dry bonding system connects the insulation glass pane with the window frame to form a stable, static unit. Depending on the size of the window, a steel core may not be required. The window becomes lighter, the stress on the fittings is reduced. The adhesive tape can be applied inline onto the extruded profiles. It can endure further proces-





12 13

# AR $\Box$ WINDOW MOUNTING

## Double-sided self-adhesive tapes for the extrusion industry

### **VITOMOUNT / VITOCOLL**

Double-sided adhesive tapes for processing in the window industry - for the mounting of window bars made of PVC, wood and metal

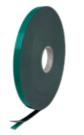
The VITOMOUNT Georgian bar mounting tape is made of a closed-cell polyethylene foam and equipped on both sides with a special acrylic adhesive. The initial tack and permanent adhesive power which is required for the mounting of Georgian window bars is achieved through the VITOMOUNT Georgian bar mounting tape, so that a subsequent sealing with elastic sealing compounds can be carried out without any problem.

The Georgian bar mounting tape is suitable for indoor and outdoor use. The application temperature should be between 18 °C and 30 °C. Please observe our application instructions for adhesive tapes.

We supply VITOMOUNT Georgian bar mounting tape in different thicknesses for the mounting of Georgian bars of different materials.

For the mounting of wooden bars, we recommend a minimum thickness of 2 mm. Generally speaking, the subsequent sealing of the gap between the glass and the wooden Georgian bars reflects the present state of the art. As the wooden bars are usually designed with a groove, a bevel or similar, the clean subsequent sealing can be carried out without any problem. As far as the mounting of PVC or metal bars is concerned, the same conditions apply. However - depending on the design - it can be possible to use tapes with a thickness of less than 2 mm.

VITOMOUNT Georgian bar mounting tapes can be supplied on rolls or bobbins. Due to their great length, the tape on bobbins is especially useful for the automatic application. The bobbins assure a high productivity of your process - up to the very last metre of



### VITOMOUNT SSPR-70 PLG 1

Double-sided adhesive tape with high initial adhesion and excellent permanent adhesion, for the permanent fixation of components both indoors and outdoors.

Especially appropriate for the mounting of PVC window (Georgian) bar profiles equipped with co-extruded sealing lips, on glass. (The test reports from the ift Rosenheim are available).

Thickness: 1,0 and 1,6 mm White or black



## VITOMOUNT Mounting tape for window bars

Double-sided adhesive tape for the mounting of (Georgian) window bars made of PVC and metal (125 SSPR-70 PLG 1) or wood (125 S-30 FBL2).

Available in rolls or cross-wound bobbins. Due to their great lengths, the bobbins are especially appropriate for the industrial processing. The bobbins assure a high productivity and continuity of your process - up to the very last metre of tape. Larger widths or smaller quantities are supplied in rolls.

Thickness: 1,0 and 1,6 mm (125 SSPR-70 PLG 1) White or black

Thickness: 2 mm and 3 mm (125 S-30 FBL2) White or black



### VITOMOUNT SI 55 PI G 1

Permanent fixation of materials with a smooth or slightly uneven surface, indoors and outdoors. It is, among others, suitable for the mounting of PVC strips on plastic frames.

The product is characterized by its quick initial adhesion and good permanent adhesion, as well as its good resistance against ageing, weathering and plasticizers. It dampens vibrations and compensates thermal dilatations.

Thickness: 1.0 mm White or black



### VITOCOLI

Adhesive transfer tapes, double-sided adhesive. Especially suitable for the mounting of plastic profiles and plastic strips in windows.

In all cases where the bonding must be thin and transparent, VITOCOLL is the right choice.

Thickness: from 0,08 mm

Colour translucent









田



## A large variety of products

Our adhesive tapes can be used for a wide variety of applications, depending on the type of tape and adhesive.

Please ask us if you are looking for an appropriate product to suit your particular application or use our "Tape Selector" on our website: www.vito-irmen.de



## Individual roll widths

You need a different roll width? We cut the rolls for you to the desired width, starting from 6 mm width (depending on the product).



## Standard die-cuts

Your adhesive tape should be a punched tape? Round, oval, square, with a finger lift or loosely poured in bulk? We die-cut your roll on our roll die-cutting machine individually, efficiently, and according to your specification.



# Die-cutting any shape according to custom design

You require a self-adhesive product in a special shape? Upon request we supply to you custom-made die-cuts according to your CAD-drawing: sheets or strips, non-adhesive, one-sided or double-sided adhesive.



## Bobbins and rolls with great lengths

We can supply some of our products also as bobbins or rolls with great lengths, for automatic processing. The great lengths allow you to minimize the set-up times of your machines.

# Instructions for the application of adhesive tapes

### General guidelines

These instructions are to be seen as guidelines for the user of adhesive tapes. They provide useful information for an optimum application. Should this information not be sufficient for your application, or should you require further guidance, we should be glad to advise you.

### **Application temperature**

The most favourable application temperatures (object- and application temperature) are between 15 °C and 30 °C. Bonding below 15°C temperatures is not recommendable. Exceptions are possible only for tapes with special types of adhesives that can be applied even at low temperatures.

### Please note:

- Below the recommended application temperature, the adhesive can become too hard. As a consequence, the optimal adhesion values will not be achieved.
- When moving the adhesive tape from a cold to a warmer place, ensure that there is sufficient time for acclimatization to avoid condensation on the surface. The same applies to the substrates which are to be bonded.

### Surface cleaning

In order to achieve and use with optimal effect the properties indicated in the technical data sheet, the surfaces to be glued must be dry and clean (remove dust, grease, humidity). Cleaning substances should comprise compatible solvents, for example, benzine or alcohol. Please observe the manufacturers' corresponding safety precautions. The cleaning cloth must be clean and exempt from lints and can be used once only. Do not touch the adhesive surface after cleaning.

### **Surface condition**

Good adhesions can be attained on smooth surfaces and surfaces with a high surface energy; whereas rough surfaces require a thicker adhesive layer. Non-critical substrates are metals, glass, rigid PVC, polycarbonate and ABS. More critical substrates with a low surface energy are polypropylene and polyethylene; powder paint, rubber, plastics equipped with lubricants, teflon and silicone.

### Please note:

- Porous surfaces (for example, concrete) or fibrous materials (for example, wood) require a sealing of the surface before bonding.
- Adhesions on soft PVC require a primer or special adhesive tapes, in order to reduce the migration of plasticizers.

### Pressur

Firmly press the adhesive tape onto the surface using a roll or a scraper. Hard adhesives require a higher application pressure than soft adhesives, in order to develop the necessary adhesive strength.

### Load

In general, any designs must be avoided that produce a delamination load or peeling force. Shearing and tensile loads must be distributed over the entire adhesive surface. Tensions at the end sections of the assembling elements must be avoided.

### Please note:

- Permanent tensions impair the stability of the adhesion.
- The adhesive tape should not be charged with a mechanical load earlier than 24 hours after the application.

### Storage

The material is to be stored in the original cardboard box at room temperature and a relative humidity of about 60% and must be protected against direct UV radiation. The storage life is indicated in the corresponding technical data

### Verification of suitability

All indicated details and technical information are based on laboratory examinations or specifications of our suppliers. All these details and information have been determined to the best of our knowledge. However, a guarantee regarding the respective completeness and correctness is excluded. Prior to the use of our product, it is necessary to check the suitability for the intended purpose of application. Questions relating to guarantee and liability for this product are regulated in our general business terms, unless legal regulations provide other relevant stipulations.

16









## VITO Irmen Quality since 1907

On March 12th, 1907, Alfred Irmen establishes in Weißenthurm the technical wholesale trade with chemical-technical products. The beginning of a long company history.

In 1913, the company moves to Remagen, where its headquarters are still based today. During the 1950s, the portfolio changed from felt products to polyethylene foams which were laminated with felt. After being coated with a one-sided self-adhesive layer, this material served as spacers. Metal and plastic foils supplemented the portfolio - a range that now also attracted attention on an international level.

The big seller at the time was "VITOPLAST - against drafts, dust and door slamming." The product made many a draughty apartment feel more comfortable. With the first coating plant in 1962, rolls could be coated in an economical way.

## VITO Irmen today: production on more than 15.000 m<sup>2</sup>

Today VITO Irmen produces on the most modern coating, stamping, winding and cutting machines a large portfolio of self-adhesive products for applications in industry, glass/ windows/facades, construction, automotive, medical technology and renewable energies. With the building of a new production and warehouse facility in Remagen with more than 6,000 m<sup>2</sup> of production and storage space we are well prepared for future requirements.

## Put to the test every day

You can rely on us: Our products are subject to constant quality controls.

You can only grant a warranty to your customer if you can rely on the products of your own supplier.

All our adhesive products not only comply with the high German manufacturing standard, but also to the specified DIN and ISO standards.

To prevent variations in quality, all production batches are tested in our laboratory for the various properties: shear and tensile behavior, temperature properties and more. Please note our application instructions on page 17.

## Further catalogues

## Construction

Sealing Tape

Partition wall tape

Nail sealing tape

Joint sealing tape (pre-compressed)

Self-adhesive sealing tapes for heating - ventilation - air conditioning

Mirror mounting tape

Mirror mounting brackets



## Glass / Window / Façade

Edge protection for fire-protection glass

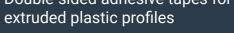
Double-sided adhesive tapes for

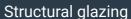
Dry glazing for insulation glass windows

wooden window construction









Glazing and sealing tapes for



Medical technology

Renewable energies

www.vito-irmen.de



田









### VITO Irmen GmbH & Co. KG

**Postal address** Postfach 1720 · D-53407 Remagen · Germany **Factory 1 / Office** Mittelstrasse 74-80 · D-53424 Remagen · Germany **Factory 2** Robert-Bosch-Strasse 1 · D-53424 Remagen · Germany

+49 2642 4007-0 sales@**vito-irmen.de** 

Your contact person / specialized dealer

