#### Technical Data Sheet 1/24

**Conductive Polyurethane (PU) Adhesive** 

R 712

For bonding conductive rubber tiles





THOMSIT R 712 meets the highest requirements for occupational safety, indoor air quality and environmental compatibility. **Important note:** Effective August 24, 2023, an appropriate training must be carried out before use (applies only to EU countries).

More information on the training courses is available here www.thomsit.de/pu-schulungen .

# **FEATURES AND BENEFITS**

- Prevents electrostatic charging
- Very high load and stress resistance
- Moisture- and weather-resistant
- High yield

# **FIELDS OF APPLICATION**

Very low-emission, two-component polyurethane adhesive for bonding:

• electrically conductive rubber tiles

on absorbent and impervious substrates in heavy-duty commercial and industrial areas. In combination with suitable flooring, THOMSIT R 712 can be used to produce electrically conductive floor structures. Recommended e.g. for operation theaters and computer rooms, laboratories and production/storage areas subject to explosion hazards.

THOMSIT R 712 meets the highest requirements for occupational safety, indoor air quality and environmental compatibility.



# **TECHNICAL DATA**

	Component A	Component B
Supplied as	black paste	brown liquid
Packaging	plastic bucket, 10 kg	
Shipping unit	39 plastic buckets per pallet	
Mixing ratio A : B	3.5 : 1 parts by weight	
Pot life	approx. 40 minutes	
Open time	none	
Working time	approx. 45 minutes	
Load bearing	after approx. 8 hours	
Chemical resistance	after approx. 7 days	
Suitability for castors chairs	resistant to chairs with castors acc. to DIN EN	12529, suitable for pallet trucks and forklifts
Grounding resistance	< 3 x 10 <sup>5</sup> Ω acc. to DIN EN 13 415	
Temperature resistance		
after curing	–20 °C to +80 °C, can be used on underfloor heating constructions	
for transport	–20 °C to +50 °C	
for storage	+10 °C to +30 °C	
Shelf life	at least 9 months, cool and dry	

The above times were measured under standard climatic conditions (23 °C/50 % rel. air humidity). Please note that under other climatic conditions curing resp. hardening may be accelerated or delayed.

# CONSUMPTION

	Consumption	Coverage / bucket		
Rubber flooring with a smooth, polished backing (e.g. Norament)				
notch size A 2	approx. 300 g/m²	approx. 33 m <sup>2</sup>		
PVC tiles				
notch size A 2	approx. 300 g/m²	approx. 33 m <sup>2</sup>		
Rubber flooring with a rough, textured backing				
notch size B 3	approx. 800 g/m²	approx. 13 m <sup>2</sup>		

## **PREPARATION OF SUBSTRATE**

Substrates must comply with the valid requirements or comparable national standards. In particular, they must be clean, free from structural defects, firm, dry and free of substances which may impair adhesion. After mechanical pretreatment (e.g. grinding/vacuuming), prepare the substrate with suitable THOMSIT primers and levelling compounds so that it is ready to receive floor coverings. For heavy-duty areas only use primers and levelling compounds that have been declared as suitable for this particular application. For the later connection to ground potential glue copper strips onto the properly prepared subfloor (1 m copper strip per 30 m<sup>2</sup> floor area). In outdoor areas and in indoor areas on subfloors in direct contact with the soil, always use THOMSIT R 755 to seal off the subfloor against capillary-rising moisture.

# **APPLICATION PROCEDURE**

The adhesive consists of two components (resin and hardener) supplied in separate compartments of the bucket. Use a sharp pointed tool to punch several holes through the plastic plug and the bottom of the top container, which acts as the bucket lid. Lift the top container slightly to allow the hardener to drain completely into the bucket below. Then carefully mix the resin and hardener using a hand drill with stirring attachment for at least 2 minutes. Apply the adhesive evenly to the subfloor using a suitable notched trowel. Only apply as much adhesive as can be laid with floor coverings within the working time.

Install the floor coverings directly into the adhesive bed, taking care to avoid any air pockets. The covering material must be free of tension and lie flat on the substrate, otherwise weight it down. Avoid rucking at the seams. After start of adhesive curing, roll over the bonded area again.

**Tip:** For control reasons apply adhesive to an offcut of the covering material at the beginning of the installation. Wait at least 12 hours after installation before having the floor construction grounded by a qualified electrician. After start of adhesive curing, roll over the bonded area again.

### **PLEASE NOTE**

- Best possible indoor air quality after floor installation work requires conformity to the standard working conditions as well as completely dry substrates, primers and levelling compounds.
- Only carry out floor installation work if the floor temperature is above 15 °C, air temperature above 18 °C and relative humidity below 75 %.
- Protect the installed floor covering from direct sunlight until the adhesive has cured.
- Remove fresh product stains immediately with commercially available industrial spirit (alcohol). Immediately after use clean the tools with industrial spirit (alcohol). Cured product residues can only be removed by mechanical means.
- Do not scrape out the bucket.
- Working time may vary depending on the temperature. They will be shorter at higher temperatures but longer at lower temperatures.
- The connection to the ground potential must always be carried out by an electrician.

### **TECHNICAL INFORMATION**

Please also follow the instructions in the following information sheets:

- "Assessment and preparation of substrates" of the Bundesverband Estrich und Belag e.V. (BEB), Troisdorf (www.bebonline.de)
- Briefing notes of the Technische Kommission Bauklebstoffe (www.klebstoffe.com, see under "Publications")
- Installation as well as cleaning and care instructions of the flooring manufacturers
- Generally recognized rules of flooring technology as well as the applicable national standards

## SERVICE FOR ARCHITECTS AND DESIGNERS

Please contact our sales force if you need advice or building project support. Further documents can be downloaded from the internet at www.thomsit.com.

## **PRODUCT SAFETY**

For commercial/industrial use only Effective August 24, 2023, an appropriate training must be carried out before industrial or commercial use.

#### Hardener component B

Contains: Diphenylmethane diisocyanate (MDI), isomers and homologues

Causes serious eye irritation. Causes skin irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause damage to organs (respiratory system) through prolonged or repeated exposure. May cause respiratory irritation. Suspected of causing cancer.

Do not inhale vapour or mist. Wear protective gloves/clothing and eye/face protection. Use only outdoors or in a well-ventilated area. In case of insufficient ventilation wear respiratory protection. Do not wear contaminated work clothing outside of the workplace. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. If possible, remove contact lenses. Continue rinsing. If eye irritation persists: call a poison control center or doctor. If inhaled: Remove person to fresh air and keep breathing unhindered. If exposed or concerned: Get medical advice/attention. Wash thoroughly after use with plenty of soap and water. Take off contaminated clothing and wash before reuse. Store in a well-ventilated place. Keep container tightly closed. Store under lock and key. Dispose of contents/container to hazardous waste disposal. The following information sheet from the trade association for the construction industry, Bau-BG must be observed: Leaflet: BGI 524 Hazardous Substances in Polyurethane Production and Processing/Isocyanates (M 044). This leaflet can be obtained, for example, from Carl Heymanns Verlag KG, Luxemburger Straße 449, 50939 Cologne, or from Wiley-VCH Verlag GmbH, Pappelallee 3, 69469 Weinheim, as well as from the responsible professional associations.

GISCODE RU 1	solvent-free according to TRGS 610
EMICODE EC 1 <sup>PLUS</sup>	very low-emission

## **Disposal of emptied PCI sales packaging**

You find more information on disposal on the Internet at <a href="https://www.pci-augsburg.eu/en/services/disposal-instructions-en/packaging">https://www.pci-augsburg.eu/en/services/disposal-instructions-en/packaging</a>. Do not allow product to enter drains, waterways or soil. Only recycle packaging that is completely empty. Hardened material residues can be disposed of as household waste. Dispose of product residues that have not hardened in the pollutant collection.

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thomsit-info@pci-group.eu www.thomsit.com The above information, in particular recommendations for the handling and use of our products, is based on our professional knowledge and experience. As materials and conditions may vary with each intended application and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for the intended application method and use. Legal liability cannot be accepted on the basis of the contents of this technical data sheet or any verbal advice given unless there is evidence of wilful intent or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.