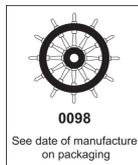


## Thick-Layer Levelling Compound

# DS 40

For producing layers of 3 - 40 mm thickness in one application



## FEATURES AND BENEFITS

- For levelling large and very different types of unevenness
- Self-levelling and pumpable
- Very smooth surface
- Low-stress formulation
- Suitable for use under parquet

## FIELDS OF APPLICATION

Very low-emission, polymer-modified, cementitious thick-layer levelling compound for producing substrates that comply with the applicable standards and are ready to receive flooring, including parquet. THOMSIT DS 40 can be used on suitable substrates such as:

- screeds and concrete
- tiles, natural stone and terrazzo
- old substrates (made of the above materials) with firmly adhering waterproof residues of adhesives and levelling compounds.

THOMSIT DS 40 can also be used in areas subject to high wear and tear, e.g. hospitals, retail outlets, shopping malls and industrial warehouses. It has been designed for universal use under resilient, textile and wood flooring. Use THOMSIT DS 40 only in dry indoor areas. Do not use as a wearing surface.

THOMSIT DS 40 has been approved and certified as a marine equipment item according to the EU Marine Equipment Directive (MED), issued and monitored by the certification body DNV GL, modules B and D.

## TECHNICAL DATA

Color / consistency	grey powder
Pack size	EVO <sup>3</sup> bag, 25 kg
Shipping unit	42 bags per pallet
Amount of gauging water	4.5 – 5.0 l / 25 kg
Working time	approx. 40 minutes
Ready for foot traffic	after approx. 2 hours
Ready to receive floor covering	
up to 20 mm layer thickness	after approx. 24 hours
over 20 up to 40 mm layer thickness	after approx. 48 hours
Ready to receive parquet	
up to 20 mm layer thickness	after approx. 48 hours
over 20 up to 40 mm layer thickness	after approx. 96 hours
Load / stress resistance	from 1 mm layer thickness upwards resistant to castors that comply with DIN EN 12529
Temperature resistance after setting	up to max. +50 °C, can be used on heated floor structures
Temperature range for transport	-20 °C to +50 °C
Temperature range for storage	0 °C to +50 °C
Shelf life	at least 12 months if stored in a cool and dry place

*The above times were measured under standard climatic conditions (+23 °C and 50 % rel. humidity). Please note that under other climatic conditions setting and drying may be accelerated or delayed.*

## CONSUMPTION

Layer thickness	Consumption	Coverage / bag
per mm	approx. 1.7 kg/m <sup>2</sup>	
3 mm	approx. 5.1 kg/m <sup>2</sup>	approx. 4.9 m <sup>2</sup>
10 mm	approx. 17 kg/m <sup>2</sup>	approx. 1.5 m <sup>2</sup>
20 mm	approx. 34 kg/m <sup>2</sup>	approx. 0.7 m <sup>2</sup>

## PREPARATION OF SUBSTRATE

The substrates must comply with the applicable standards and regulations. In particular, they must be clean, firm, dry and free of cracks or substances which may impair adhesion. The following maximum permissible residual moisture contents must always be observed (indicated in % by weight, measured with a CM moisture meter):

Screed type	Resilient and textile flooring, parquet and other wood flooring, laminate	
	Heated	Unheated

Cement screed	1.8 %	2.0 %
Calcium sulfate screed	0.3 %	0.5 %

The ingress of moisture into the floor structure must always be prevented by suitable measures (e.g. waterproofing membranes, barrier primers). This applies in particular to composite structures and concrete floors. In the case of cementitious substrates, any laitance must be removed mechanically with suitable machines. Always grind calcium sulfate screeds (16 grit) and vacuum off the dust. Smooth, impervious substrates such as ceramic tiles and slabs must always be stripped and sanded. Pretreat the substrate with a recommended THOMSIT primer before applying the levelling compound. When applying THOMSIT DS 40 on calcium sulfate screeds or other moisture-sensitive substrates, exclusively use THOMSIT R 755 Epoxy Safety Primer. Protect the adjoining areas by installing edge insulation strips around the perimeter (to prevent direct contact between wall and levelling compound).

## APPLICATION PROCEDURE

Fill the specified amount of clear gauging water into a clean mixing tub. Add a 25 kg bag of THOMSIT DS 40 and mix with a suitable stirrer (e.g. THOMSIT TE 162 Exaquir). Stir at approx. 600 rpm for about 2 minutes until the mixture is free of lumps. For layers of more than 10 up to 40 mm thickness, the compound can be bulked out by adding up to 30 % fire-dried quartz sand (grain size 0 - 2 mm). Apply the compound in the required layer thickness using a squeegee or smoothing trowel. THOMSIT DS 40 is suitable for machine application. For further information refer to the "Guideline for pumping levelling compounds" which can be downloaded from [www.thomsit.com](http://www.thomsit.com).

## 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 %.
- Wait until the applied layer is completely dry before continuing with the next steps. Make sure to provide favorable climatic conditions (recommended: 50 % RH and +20 °C) and adequate air circulation.
- There is danger of crack formation if the water is removed too quickly, caused e.g. by high room temperatures or highly absorbent substrates. Therefore protect the freshly applied layer from drying out too quickly. If possible, cover it with flooring within 14 days after application. If this is not possible, protect the surface against too rapid drying or rainfall, e.g. by covering it with protective sheeting.
- Protect the freshly levelled surface from direct sunlight and drafts.
- Do not mix the product with other levelling compounds.
- On non-absorbent and moisture-sensitive substrates (e.g. ceramic tiles, calcium sulfate screeds, wood/wooden boards, firmly adhering residues of adhesive etc.), we always recommend using a reactive resin primer with quartz sand sprinkling if the layer thickness is 10 mm or more.
- Apply a layer of at least 2 mm thickness on non-absorbent substrates.
- On mastic asphalt screeds, the levelling layer must have a maximum thickness of 5 mm.
- Do not use outdoors or in areas directly/indirectly exposed to moisture. If in doubt, use suitable moisture barriers.
- Do not use THOMSIT DS 40 as a screed or wearing surface.
- Clean the tools with water immediately after use.
- Tightly close the opened bag and use up the content as quickly as possible.
- When applied on soft layers (e.g. adhesive residues), cementitious levelling compounds are susceptible to cracking. Therefore remove such layers as far as possible before applying the compound.

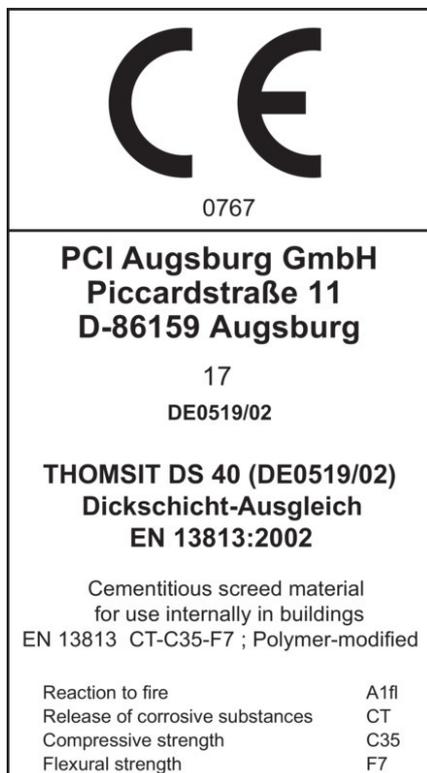
## TECHNICAL INFORMATION

Make sure to observe the following standards and information sheets:

- DIN 18365 "Flooring Works"
- DIN 18356 "Parquet Works"
- Technical Briefing Notes issued by Technische Kommission Bauklebstoffe ([klebstoffe.com](http://klebstoffe.com), see "Publications"), in particular TKB-8 "Assessment and preparation of substrates" and TKB-9 "Technical specification and installation of floor levelling compounds"
- "Assessment and surface preparation of anhydrite flow screeds" issued by Bundesverband Estrich und Belag e.V. (BEB), [beb-online.de](http://beb-online.de)
- "Assessment and preparation of substrates" issued by Bundesverband Estrich und Belag e.V. (BEB), [beb-online.de](http://beb-online.de)
- Generally recognized rules of the trade as well as the applicable national standards and regulations

## 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](http://www.thomsit.com).



## DECLARATION OF PERFORMANCE

The Declaration of Performance can be downloaded as pdf file under [www.thomsit.com](http://www.thomsit.com).

## PRODUCT SAFETY

Contains Portland cement. Causes serious eye damage. Causes skin irritation. Keep out of the reach of children. Wear waterproof, sturdy protective gloves as well as eye & face protection. In case of contact with the eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice / attention. In case of contact with the skin, wash with plenty of soap and water. If skin irritation occurs, get medical advice /

attention. Ensure adequate ventilation during the application and drying process. Avoid eating, drinking and smoking while working with the product. Wear long pants during application. Keep children away from the fresh material. The longer fresh material remains on the skin, the greater the risk of serious skin damage. Information for allergy sufferers on +49 (821) 5901-380. For further information please refer to the Safety Data Sheet which is available at [www.thomsit.com](http://www.thomsit.com).

**Ingredients:** Portland cement, calcium aluminate cement, calcium sulfate hemihydrate, quartz sand, calcium carbonate, vinyl acetate ethylene copolymer

GISCODE ZP 1	Low chromate content according to European Directive 2003/53/EC
EMICODE EC 1 <sup>PLUS</sup>	very low-emission
DE-UZ 113 Blue Angel	Environmentally friendly due to very low emissions

## DISPOSAL

Further information on disposal can be found on our homepage at <http://www.thomsit.de/services-seminare/entsorgungshinweise>. Do not allow the product to enter sewer systems, surface waters or the soil. Only return the completely emptied buckets for recycling. Dried material residues can be disposed of as household waste. Non-hardened product residues must be taken to a collection point for hazardous waste.

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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.