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TL\_Term\_240\_Light Label: Issue: October 2012 Revision: November 2012

**TECHNICAL DATA SHEET** 

**KEMATERM 240 LIGHT** 

Light machine applicable adhesive and levelling compound for heat insulating panels

PRODUCT DESCRIPTION

White, powdered adhesive and reinforcement layer with light additives for manual and especially for machine application.

Field of use

It is used as an adhesive for adhesion of heat-insulating coverings (EPS, XS 022; Mineral), as a reinforcement layer and for levelling on mineral substrates.

**Product properties** 

- High vield
- · Water vapour permeable
- High adhesive strength
- Easy processing

#### PRODUCT DATA

**Basic information** 

Appearance	White powder	
Packing	25 kg in bag (plastificated) / 1350 kg (54 x 25 kg) on pallet	
Storage and expiration date	12 months from the day of manufacture when stored properly in dry place and in the original, sealed and undamaged packaging. Manufacture date is stamped on the packaging.	

## Technical data

Type of product	Cement, organic additive, sands, lightweight aggregates	
Grain size	D <sub>max</sub> : 1,5 mm	
Bulk density of powder	1,05 kg/l	
Thermal conductivity λn	0.8 W/mK	
μ value	approx. 50	
sd-value	0,15 m (with 3 mm layer thickness)	

## INSTRUCTIONS FOR USE

Consumption

As adhesive:

approximately 3,5 kg/m<sup>2</sup> (for hand work) approximately 6 kg/m<sup>2</sup> (for machine application)

As reinforcement

approximately 3-4 kg/m² (for 3 mm thickness) approximately 5,5-6,5 kg/m² (for 5 mm thickness) approximately 8 kg/m² (for 8 mm thickness)

Base

Surface has to be carrying and without cracks. It has to be clean, solid, dry, free of all oil, grease, wax, latex compounds, curing compounds, dust and all foreign matter. The surface has to fulfil the requirements of norm ONORM B 2259, B 6410. For levelling it has to fulfil the requirements of norm ONORM B 2210 and B 3346. The evenness of the wall has to fulfil the requirements of norm DIN 18202.

Mix ratio

6-6.5 I of water per 25 kg of dry mixture

Mix time

In dry mixture add the clean water and mix, so that homogenous mass of medium plastic consistency without clods is obtained (in continuous mixer constantly add water, additional mixing with electrical mixer is necessary). Leave it to rest for 5 minutes to intumesce and then stir again thoroughly right before using it. If necessary, add some water. Water must not be added to the mortar that is already in the binding phase.

Mix tool

Mix mortar with electrical mixer with a suitable accessory for mixing in a clean container or continuous mixer.



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#### Installation

Manual adhesive application:

When adhering to even bases, apply a layer of adhesive with a notched trowel with 7 to 10 mm-sized teeth on the whole surface of the rear side of the board. When adhering to uneven bases, a frame of mortar is made on the edges of the board on its rear side with a trowel and another 3 points are made in the middle of the rear side of the board. After adhesion, the adhesive must cover at least 40% of the board's surface (considering approx. 1-2 cm thickness of adhesive layer). Irregularities up to 10 mm can be compensated in the adhesive bed. Max. thickness of adhesive layer 2 cm.

Machine adhesive application:

The adhesive is applied continuously meandrine to the substrate. It is important to ensure that the insulation boards are installed quickly on the fresh adhesive. Formation of a skin has to be prevent anyway. The contact area shall be at least 60%

Application of reinforcement layer for EPS insulation boards:

Kematerm 240 Light is applied with a stainless steel trowel (10 mm teeth). In the fresh adhesive the textile glass mesh is embedded wrinkle-free, if possible in continuous paths with at least 10 cm wide overlap. The textile glass mesh must be at least 1 mm (in the overlapping area at least 0.5 mm, 3 mm max.) covered with Kematerm 240 Light. The embedded textile glass mesh has to be covered "wet on wet" with the adhesive. Excessive smoothing should be avoided. Possible nominal thickness of the reinforcement layer and position of textile glass mesh, see Table 1

Application of reinforcement layer for Mineral insulation boards:

To ensure a uniform thickness of the reinforcement layer, after installation of the insulation boards and after setting of the adhesive, a levelling with Kematerm 240 Light has to be applied on the insulation boards. After a standing time of 2-3 days, the reinforcement layer has to be applied acc. to Table 1 in the defined nominal thickness. Kematerm 240 Light is applied with a stainless steel trowel (>10 mm teeth). In the fresh mortar the textile glass mesh is embedded wrinkle-free, if possible in continuous paths with at least 10 cm wide overlap. The textile glass mesh must be at least 1 mm (in the overlapping area at least 0.5 mm, 3 mm max.) covered with Kematerm 240 Light. The embedded textile glass mesh has to be covered "wet on wet" with the adhesive. Excessive smoothing should be avoided. Possible nominal thickness of the reinforcement layer and position of textile glass mesh, see Table 1.

Total thickness of the reinforcement layer (levelling layer + reinforced base coat mortar) is 5-7 mm.

Application of reinforcement layer for XS 022 insulation boards:

Kematerm 240 Light firstly has to be applied for levelling in a thickness of 2-3 mm and combed through with a notched trowel. After a standing time of 2-3 days, the reinforced layer has to be applied acc. to Table 1 in the defined nominal thickness.

Kematerm 240 Light is applied with a stainless steel trowel (>10 mm teeth). In the fresh adhesive the textile glass mesh is embedded wrinkle-free, if possible in continuous paths with at least 10 cm wide overlap. The textile glass mesh must be at least 1 mm (in the overlapping area at least 0.5 mm, 3 mm max.) covered with Kematerm 240 Light. The embedded textile glass mesh has to be covered "wet on wet" with the adhesive. Excessive smoothing should be avoided. Possible nominal thickness of reinforcement layer and position of textile glass mesh, see Table 1.

Total thickness of base coat mortar is 7-8 mm.

Installation as levelling:

On concrete: Clean substrate thoroughly and remove release agents such as formwork wax or oil with high pressure washer.

On lime/cement plasters: Clean substrate thoroughtly. Repair cracks in separate step.

On existing organic final plasters and paints: Make pull- off test according to processing instructions for ETICS. Clean substrate thoroughly. Repair cracks in separate step.

#### Table 1

Nominal thickness Minimal thickness Middle value 1) in mm Position of textile glass mesh

3mm	2mm	≥2,5	middle
5mm	4 mm	≥4,5	outer third
8 mm	7 mm	≥7,5	outer third

1) mean value of representative sample (min. 5 individual values) in cured state

#### Tool

Trowel or mixing pump

Kematerm 240 Light can be applied with any ordinary mixing pump (e.g. PFT G4) using a snails for heavy mortar. Maximum hose length: 40 m

Water setting: adjust to circumstances on site (mixing pump, length of hose, water pressure, ...).

### **Cleaning of tool**

Clean tools immediately after use before mortar hardens. Hardened material on tools can only be removed mechanically. approx. 1.5 hour

Usage time

# LIMITATIONS

Base temperature
Air temperature

+5°C min./ +30°C max.

Material temperature

+5°C min./ +30°C max.

Warnings

Times specified in the technical sheet were measured at the temperature of +20°C and relative air humidity of ≤ 70%.



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- Higher temperatures reduce, while lower temperatures prolong this times.

   Before any other coating is applied a standing time of at least 7 days has to be observed, and it is particularly important that the coating has an uniform dry imaging without wet spots (dark spots on the facade).

   Protect freshly installed material from direct sun, freezing, strong wind, rain and other bad weather conditions. The material should not be used at (surface, air, material) temperatures lower than 5°C.

Recommendation: Remains of unhardened/unset material have to be removed in accordance with the legislation.

Data source: All technical data in this technical sheet were obtained by laboratory research. Actual data may differ due to different working

Local restrictions: Due to specific local regulations the installed product can differ from country to country. For exact instructions for use a country specific technical sheet should be obtained.

**SAFETY DATA** 

Irritating. Contains cement. Irritating to eyes, skin and respiratory tract. Contact with skin may cause hypersensitivity. In case of eye contact wash thoroughly with water at once and consult a doctor. In case of skin contact flood with a lot of water. Keep away from the reach of children. More data on storage, handling and use of mixture can be found in the safety sheet which contains safety, toxicological and ecological data. Warnings on the original packaging should also be considered.

**LEGAL BASE** 

Information and recommendations related to use of KEMA products are presented in good faith and believed to be correct. The later is based on our knowledge and experience with the products. Information is supplied upon the condition that products are stored and used according to the recommendations and the persons receiving the same will make their own determination as to its suitability for their purposes prior to use. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to Information or the product to which information no event will KEMA be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to the use any product, process, equipment or formulation in conflict with any patent, and KEMA makes no representation or warranty, expressed or implied that the use thereof will not infringe any patent. All orders fall under current sales and supply conditions. The user should always check the latest technical sheet available upon demand.