

# MONOFLEX

## FLEXIBLE CEMENT-BASED TILE ADHESIVE

### Product Description:

MONOFLEX is a high grade, polymer-modified, thin bed adhesive, tested and supervised according to EN 1004, for interior and exterior applications. MONOFLEX is easily workable with a high initial bond and has very good stability. Due to its flexible form, application is also suitable on weak deformable surfaces.

### Areas of Application:

MONOFLEX is used as a tile adhesive for thin layer methods for ceramic coatings (even fine earthenware), mosaic, clinker, brick tiles and insulating plasterboards. For translucent materials, MONOFLEX white is recommended. MONOFLEX is suitable for application on masonry, plaster, gas concrete, concrete and gypsum board as well as old tiles. MONOFLEX is suitable and flexible for surfaces such as heating screed (see special technical leaflet), precast concrete (at least two months old) and dry construction boards such as gypsum boards etc. MONOFLEX is suitable for tile laying on composite sealed surfaces in interior applications according to the ZDB leaflet.

### Technical Properties:

Basis	: sand/cement (plastic modified).
Colour	: cement grey, white.
Filler structure	: fine sand.
Bulk density	: approx. 1.25 kg/l
Application temperature	: +5°C up to +30°C

Pot life *)	: approx. 1 hour.
Skin formation *)	: approx. 25 minutes.
Traversable *)	: after approx. 24 hours.
Jointable *)	: after approx. 24 hours.
Cleaning	: in green water condition with water.
Official tests	: according to EN12004 supervised by MPA Dortmund.
Consumption	: depending on the surface tiles, minimum 1.2 kg/m <sup>2</sup> in dry.
Storage	: storage for at least 12 months.
Packaging	: 25 kg bags with PE inlet, 6 kg (6 bags in one cardboard box).

\*) The values are valid at an ambient temperature of +20°C and at 65% relative humidity.

### Surface Preparation:

The surface must be dry, resp. moist, load-bearing and free from dirt, dust and release agents. Further information is available in DIN 18157 art 1 to be adhered to. Prime absorbent substrates with ASO®-Universal. Smooth concrete surfaces have to be roughened, anhydrite screed are to be abraded and primed with ASO®-Universal Primer.

### Product Preparation:

MONOFLEX is mixed with fresh water until a lump free, pasty mortar is obtained. Mixing ratio:

- 1.00 l water to 4 kg MONOFLEX.
- 6.25 l water to 25 kg MONOFLEX.



Do not over more surface than is required, keeping within the handling time of up to two hours. The ready-to-use adhesive is applied with surface continuity and trowelled with a suitable serrated trowel. The tiles are fixed with light pressure.

### **Important Advice:**

With the application of ASOFLEX-AKB for laying of tiles, we recommend ASODUR-EK98. For laying tiles slabs on highly stressed areas such as balconies and terraces, we recommend applying our highly elasticated binding sealant system AQUAFIN®-2K/M and UNIFIX-2k. For laying of cast stone or natural stone, it is imperative that the specific product details of the cast material (decolourisation and key dangers) etc. and also the laying recommendations, be regarded. If in doubt, carry out tests in advance. To reduce key factors due to water penetration we recommended the application ASODUR0EK98 for agglomerating a cast stone. For levels containing calcium sulfate bindings, we recommended a primer such as ASO®- Universal-GE and ASO®- Universal-Prime-K (mix ratio 1:3 with water) To reduce the effect of ettringite in calcium sulfate layers we recommend UNFIX-AEK, for relocation of such layers with up to 1% of remaining humidity for heated constructions and 1.5% remaining humidity for unheated constructions (according up to date measures provided by FBH-AD – official handling regulations). Thin bed mortar which has already hardened should not receive additional water or freshly mixed mortar amounts, trying to achieve a better workable mixture, may cause a lack of strength development. For permanent underwater areas (swimming pools and water vessels etc.) we recommended UNIFIX-2K/6 our thin bed adhesive system on such areas for application with appropriate Aquafin Pakistan sealants. Industrial flooring can be destroyed by direct contact between the screen topping and the cemented tiling, a chemical reaction is caused and is known as expansion tendency due to magnesia. A back

Drop in the moisture load capacity of the surface must be under all circumstances be prevented. The magnesia base is to be mechanically abraded and is to be primed (approx. 250 g/m<sup>2</sup>) with ASODUR-D2\_Epoxy resin and an additional 5% max. of water. After a waiting time of 12 to 24 hours at an ambient temperature of +20°C, the second layer of ASODUR-D2 can be applied (approx. 300-350 g/m<sup>2</sup>). The fresh layer of siliceous sand (grain size 0.5 to 1.0 mm) is to be spread over the area. After waiting a further 12 to 16 hours the tile laying can be carried out. MONOFLEX is an hydraulical hardening, thin-bed mortar sealant which can, however, take several days to completely harden under the influence of bad weather conditions. The area should be protected against rain and frost exposure. Surfaces which are not to be treated should be protected prior to the application of MONOFLEX. The up-to-date, active rules and regulations are to be adhered to: (German Industrial Standards such as): BEB-Info Sheets (Bundesverband Estrich und Belag e.V. German Federal Association for screed and surface laying). Including technical literature currently handled out by the German Federal Association for screed and surface laying). Including technical information, and interface coordination for heated flooring constructions. Other technical literature currently handed out by the German Federal tiling Industry, such as:

1. "References on sealants in connection with ceramic tiling and slabs for interior and exterior use" (August 2000).
2. "Settlement joints on surfaces covered with tiles and concrete tiling".
3. "See 1".
4. "Ceramic tiles and slabs, Natural Stone and cast stone on floor constructions with layers of insulation".
5. "Ceramic tiles and slabs, Natural stone and cast stone on heated concrete floor constructions".
6. "Surface constructions covered with tiles and slabs for outdoor building surroundings".



### Safety Advice:

MONOFLEX contains cement and reacts alkaline with moisture. Therefore:

- Protect skin and eyes.
- In case of irritation wash thoroughly with clear cool water.
- In case of eye contact seek immediate medical treatment.

With a low content of chromate according to TRGS 613.

Please adhere to the current EC-Safety Data Sheet (MSDS).

