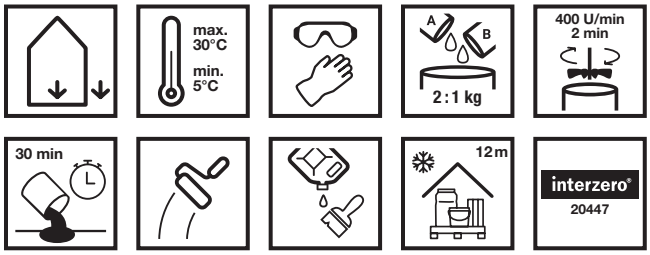
HADALAN® MBH 12E

Multifunction construction resin, epoxy resin for a wide range of applications



These pictograms apply to the **basic product**.
Deviations are possible depending on the area of application and processing.

PRODUCT INFORMATION

Description

- HADALAN® MBH 12E is a multifunctional epoxy resin. It adheres very well to almost all dry and clean substrates. The material is characterized by its good chemical resistance to water, salt solutions, petrol, oils, greases and many other chemicals as well as its mechanical strength. HADALAN® MBH 12E can be used universally filled or pure. Thanks to its low-emission and low-yellowing properties, many indoor and outdoor applications are possible.

Application

- Protective coating for surfaces exposed to chemical and mechanical stresses
- thick coating for protection against aggressive substances
- Adhesive and injection for building materials such as concrete, stone, steel, wood, fiber cement, tiles, etc.
- replaces metal fasteners in many cases and for anchoring machine parts to concrete
- Bonding bridge between new and old concrete and as a binder for synthetic resin mortar and synthetic resin coatings
- Binder for decorative design with colored sands and grains
- Sealing decorative interior surfaces
- Plastic mortar for repair and coating work with high mechanical and chemical resistance in combination with hot-air-dried quartz sand

Operational area

- multifunctional use as primer, coating and synthetic resin mortar
- indoor and outdoor areas
- force-fit grouting
- coatings, sealants, coving
- bonding bridges

Properties

- solvent-free
- osmosis-resistant
- transparent
- easy to process
- very high adhesion
- wear-resistant
- VOC-free

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Technical Data

Available container sizes	24 kg/set (sheet metal bucket/sheet metal bucket) 9 kg/combination container 1 kg/combination container
Component A	24 kg / 6 kg / 0.66 kg resin
Component B	8 kg / 3 kg / 0.33 kg hardener
Density, ready to use	approx. 1.05 kg/l
Processing temperature	+5°C to +30°C
Processing time	approx. 30 – 40 minutes[1)]
Rain resistance	after approx. 4 hours [1)]
Resilience	fully cured and loadable after approx. 24 hours, final strength after approx. 5 days [1)]
Compressive strength	in MV 1:13 with HADALAN FGM012 57M approx. 90 N/mm²
Flexural strength	in MV 1:13 with HADALAN FGM012 57M > 14.8 N/mm²
Shore hardness (Shore D)	82
Adhesive tensile strength	> 4 N/mm²
Storage	frost-free and cool, 12 months
Consumption	approx. 0.2 – 0.5 kg/m² for unfilled thick coats approx. 0.3 – 0.6 kg/m² for bonding bridges approx. 0.2 – 0.4 kg/m² as a primer

[1)] At +20 °C and 60 % relative humidity

Chemical resistance* based on DIN EN 13529

	Resistance over a period of:				
Test medium	24 hours	4 days	7 days	15 days	32 days
Acetic acid 10 %					
Sodium hydroxide 20 %					
Ethanol/IPA 1:1					
White spirit					
Xylene					
Hydrochloric acid 20 %					
Sulphuric acid 20 %					
Diesel oil					
Skydrol					

*The chemical resistance depends on the concentration, the temperature and the exposure time. Soiling must be removed immediately.
Even with positive chemical resistance, changes to the surface, such as loss of gloss or discolouration, may occur. However, this does not affect the functionality of the material used.

SUBSTRATE

Properties/tests

- The grout mortar must be firm, load-bearing and free from dust, dirt, oil, grease and loose parts.
- The substrate must have sufficient strength for the type of use.
- The adhesive tensile strength of the substrate must be at least 1.5 N/mm².

Preparation

- The floor surface must be prepared by e.g. dust-free shot blasting, diamond grinding, milling or other suitable measures. The grain structure must be exposed and all separating substances and loose components must be removed thoroughly. Substrates whose surfaces have been treated with smoothing agents (waxes) must always be removed by milling and subsequent shot blasting.

AREAS OF APPLICATION AND PROCESSING

Applying

- Stir the hardener (component B) into the resin (component A) homogeneously and without streaks using a slow-running stirring tool. Mixing ratio: 2 GT resin : 1 GT hardener.
- After mixing, pour the material into a clean container and mix again briefly.
- By adding HADALAN FGM003 57M and HADALAN FGM012 57M, **repair, leveling, grouting and bonding compounds** with good chemical and abrasion resistance can be produced. Depending on the degree of filling, the result is a flowable compound or a stable mortar.
- Up to 3 GT of HADALAN FGM003 57M are added to 1 GT of binder to achieve a flowable **running compound**.
- To achieve a trowelable, waterproof **mortar**, add up to 10 GT of HADALAN FGM012 57M to 1 GT of binder.
- Application depending on the type of use.
- The mortar is applied with a trowel and a smoothing trowel. Cleaning the trowel with HADALAN EPV 38L in the meantime makes it easier to smooth the mortar.

NOTES

Cleaning

- Clean tools immediately after use with HADALAN EPV 38L.
- Hardened material can only be removed mechanically.

System products

- HADALAN® FGM003 57M
- HADALAN® FGM012 57M
- HADALAN® EPV 38L
- HADALAN® DQ0308 89M

To be observed

- Maintain a processing temperature of +5 °C to +30 °C.
- As moisture greatly impairs the hardening of the resin, the aggregates to be used must be dry.
- High temperatures accelerate, low temperatures delay the solidification and curing process.
- The substrate temperature must be at least 3 °C above the dew point temperature during application and curing.
- Epoxy resins are not permanently color stable.

Ingredients

- Epoxy resin, Epoxy hardener

Occupational safety / Recommendation

- Further information on safety during transportation, storage and handling can be found in the current safety data sheets. Comprehensive instructions can be found in the DGUV Regulation 113-012 (previously BG regulations 227) “Activities with epoxy resins” issued by the trade associations.

Disposal

- The following applies to all systems: Only return empty containers to recycling partner Interseroh. Cured material residues can be disposed of in accordance with EWC code no. 08 01 11 (paint and varnish waste containing organic solvents or other hazardous substances).

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The statements are made based on extensive tests and practical experiences. They cannot be applied to every application case. Therefore, we recommend carrying out application trials if necessary. Subject to technical changes in the course of further development. Furthermore, our General Terms and Conditions of Business apply.