

industrial and decorative flooring

coatings for concrete and steel

wearing courses for bridge deck and other constructions

HIM Products B.V.

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HIM Primers

Range of primers for **HIM** flooring systems and **Himgrip** wearing courses

Uses

HIM Primers are recommended for **HIM** flooring systems and **Himgrip** wearing courses.

In general primers have 3 functions:

- ▼ Wetting the substrate in order to achieve a good adgesuion between the substrate and the resin flooring system
- ▼ Closing the pores in the substrate, elimination absorpion by the substrate
- ▼ Prevent air in the substrate to escape during application

Selection of primer

The selection of the primer will depend on the nature of the substrate and the desired flooring system. The table below will help to select the correct primer. You should also take into consideration the flooring system that will be applied on top of the primer. Consult the relevant technical data sheet.

Technical Data Sheets of flooring systems and wearing courses

Besides the primer a correct preparation of the substrate is important. All information can be found in the individual technical datasheets.

Selection table

Substrate	Primer 31	Primer 30	Primer 25	Primer 32	Primer 36	Primer EP203	Primer NT	RAG-N1
Typical	standard primer	fast curing	Porous substra te		moisture > 5% and < 8% (CM)		Himgrip NT on steel	
Acrylic								
Aluminium						х		
anhydrite *)	x			X				x
Concrete	x	x			x			x
Form plywood						x		
bituminous substrate								
calciumsulphate *)	x			X				x
Cementspecie			x		x			
Epoxy		In general no primer required						
Ekki hardwood	In general no primer required							
Wood					If required			
composite (recycled)	prelininary tests should be carried out, because of varying composition							
Steel						x	x	
steel, galvanized						x		
Ceramic tiles						x		
Sand cement Scraping with Himfloor SL1000 or RAG-N1 recommended								

^{*)} for anhydite (calciumsulphate) sybstrates we recommend to use HIM Primer 32 first to achieve adhesion to the substrate, followed by HIM Primer 31 to prevent entrapped air from escaping during application and curing of the flooring system.



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Product Descriptions

HIM Primer 31

Commonly used, solvent free, two component epoxy primer. It is used in combination with self leveling floors, wearing courses, multi layer floors and trowel floors.

HIM Primer 30

Fast curing, solvent free, two component epoxy primer. It is used in combination with self leveling floors, wearing courses, multi layer floors and trowel floors, when time is a crucial factor.

HIM Primer 25

Solvent based two component epoxy primer. It is used for epoxy flooring systems in combination with porous, sucking substrates. HIM Primer 25 has an excellent penetration.

HIM Primer 32

Water dispersed two component epoxy primer. It is used on anhydrite substrates in combination with epoxy flooring systems. The anhydrite should not contain more than 0.5% of water.

HIM Primer 36

Two component epoxy primer. It is used in combination with epoxy flooring sysrems and wearing courses, if a moisture percentage of > 5% and < 8% is measured with the CM-method.

HIM Primer EP203

Solvent based, two component, rust protective epoxy primer for very specific substrates (see the selection table). It is used in combination with epoxy flooring systems.

HIM Primer NT

Water-based, two component, rust protective primer, based on polyurethane. It is used on steel substrates in combination with the wearing course Himgrip NT.

HIM RAG-N1 primer

Solvent free, two component, epoxy primer. It is used in combination with self leveling floors, wearing courses, multi layer floors and trowel floors.

Technical data

	Primer	Primer	Primer	Primer	Primer	Primer	Primer	Primer
	31	30	25	32	36	EP203	NT	RAG-N1
Mix ratio base : hardener								
By weight	74:26	70:30	65:35	25:75	61:39	75:25	85:15	69:31
By volume	71:29	68:32	63:37	22:78	58:42	69:31	83:17	66:34
Specific gravity (mixed)	ca. 1,1	ca. 1,1	ca. 1,1	ca. 1,0	ca. 1,1	ca. 1,45	ca. 1,32	ca. 1.09
Volume of solids (mixed)	100%	100%	app 88% wt	app 40% vol.	100%	app 50% vol.	58%	100%
Theor. Material consumption (depending on substrate and temperature)	app 0,23 l/m ²	app 0,25 l/m²	app 0,14 I/m ²	app 0,2 I/m ²	app 0,23 I/m ²	app 0,12 kg/m²	0,08-0,1 kg/m²	App 0,25 kg/m ²
Number of layers	1	1	1	1	1	1	1	1
min. Temperature	5°C	5°C	5°C	10°C	10°C	5°C	10°C	10°C
Pot life at 20°C	30 min.	15 min.	50 min.	60 min.	30 min.	8 uren	45 min.	15 min.
Curing time at 20°C	16 hours	2-4 hours	± 24 hours,* but < 48 hours	min. 16 hours, max. 36 hours	22 hours	min. 16 hours, max. 3 weeks	24 hours	16 hours



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Temperature limitations

De primers niet aanbrengen bij temperaturen onder 5° C / 10° C (zie tabel) en bij een ondergrondtemperatuur die lager is dan de dauwpunttemperatuur plus 3° C. Maximum temperatuur 35° C.

Surface preparation

The primer should be applied on a sound, clean, dry substrate, free from contamination of fat and oil, in order to achieve a good and lasting bonding between substrate and flooring system.

Steel: HIM Primer NT should be applied on fresh blasted steel SA 21/2.

Limitations

New concrete floors should contain less than 5% moisture (CM method). With non-self-supporting concrete floors transfer of moisture from the soil might occur, resulting in adhesion failures of the flooring system. In order to judge the suitability of a substrate beforehand: apply the rubber mat test. If the existing substrate is showing cracks or movement, this may show in the new applied layer. Existing expansion joints must be repeated in the new Floor. The concrete substrate should have a compressive strength of minimal 25 MPa and must be pre-treated properly to acchieve the required adhesion. This allows a good adhesion of the first layer of the flooring system in order to obtain a minimal result of 1.5MPa in the pull-off test. The roughness should be in accordance with the coat thickness of the flooring system. Concrete substrates should show no vapor pressure. The water contents in anhydrite floors should be < 0.5% (CM method). In case the water contents in the floor is between 5% and 8% (CM method) or in case of vapor pressure, HIM Primer 36 (a water tolerant primer) should be used.

Mixing

Mix the components of the primer in the given mix ratio's by adding the hardener to the base component. It is important that the components are intermixed thoroughly with a spiral paddle in a slow speed heavy-duty drill.

Material consumption (theor.)

See Technical data

Application

Immediately after mixing the primer should be applied in a thin continuous layer by roller, brush or airless spray. Avoid thick lyers and puddling. On porous substrates a second coat may be required.

Pot life and curing time

See technical data

Thinning

Absolutely no thinning allowed for HIM Primer 31, HIM Primer 30, HIM Primer 25, HIM Primer 32, HIM Primer 36, Himfloor RAG-N1 and HIM Primer NT. HIM Primer EP203 is ready for use. However if necessary maximum 5 vol.% of HIM Solvent 102 may be added.

Tool cleaning

Immediately after use tools and equipment must be cleaned, using HIM Solvent 102.

2000

Shelf life

The primers have a shelf life of 12 months if kept in a dry, cool store in the original, unopened packs.

Safety precautions

The components mentioned in this product information sheet, may be classified as irritant, flammable or corrosive. Material Safety Data Sheets, available for each component, must therefore be fully consulted in order to make sure relevant care is taken.

Flash points

HIM Primer 25 base	28°C
HIM Primer 25 hardener	> 100°C
HIM Primer 30 base	> 100°C
HIM Primer 30 hardener	> 100°C
HIM Primer 31 base	> 100°C
HIM Primer 31 hardener	> 100°C
HIM Primer 32 base	> 100°C
HIM Primer 32 hardener	n.a.
HIM Primer 36 base	> 100°C
HIM Primer 36 hardener	76°C
HIM Primer EP203 base	25°C
HIM Primer EP203 hardener	24°C
HIM Primer NT base	n.a.
HIM Primer NT hardener	> 100°C
HIM RAG-N1 base	> 150°C
HIM RAG-N1 hardener	> 100°C
HIM Solvent 102	32°C

Disposal

Disposal of spillage or empty packaging should be in accordance with local waste disposal regulations. For further information refer to the Material Safety Data sheet.