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FLOORING SYSTEMS:
Products Guide

VERS 10/22

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CAUTIONS

The following indications derive from on-site experience and are of a general nature; the user must always assess whether the product is suitable for use in terms of type and method of use, on which the final performance depends. Yields may vary considerably depending on the nature and roughness of the substrate; for specific data it is necessary to carry out on-site sampling.
Always consult the individual technical data sheets of the products to be used.

The minimum temperature for using two-component floor products must be 12-13°C; the value refers to the substrate and it must be borne in mind that the air temperature is on average 3-4 °C higher than the floor temperature; in all doubtful cases check the value with an infrared thermometer.

The substrate must be clean, free of substances that hinder the adhesion of the product (waxes, silicones, oily traces). Very smooth substrates, with oily substances absorbed pro-fondly must be roughened by suitable mechanical intervention (shot peening, milling, sanding). New cement substrates must be cured for at least 40 days.

The substrate must be dry; the presence of counterthrusting water, if inadequately treated, can cause the applied cycle to detach; to check the humidity in the substrate, fix plastic sheets (in a number proportionate to the width of the surface) with tape and after 24 -48 hours check the humidity level at the point where the sheet was positioned using a hygrometer.

In the realisation of epoxy cycles, the overcoating time between layers is fundamental, which must not in any case be longer than 24 hours in order to avoid adhesion defects on the previous, excessively cross-linked layer.

When working on previous finishes, after cleaning, carefully check the adhesion; mechanical surface abrasion of the product in place must then always be carried out using the most suitable method (sanding, shot peening, etc.).

SUBSTRATE PREPARATION: Concrete substrates

Untreated substrates must be properly seasoned (if new), clean, with no absorbed substances that may hinder the adhesion of the planned cycle.
A primer specific to the intended cycle must always be applied before finishing.

	Diluition	Diliuted product yeld	Product yeld (concentrate)
Primer for water epoxy cycles			
DUALENE EPX IMC W	**H_2O max. 100%**	**7 m^2/L**	**0,08 L/m^2**
Primer for water polyurethane			
DUALENE AIC IMC W	**H_2O max. 100%**	**7 m^2/L**	**0,08 L/m^2**
Primer for solvent cycles (EPX / PUR)			
DUALENE EPX FTR	**dil epx max 100%**	**7 m^2/L**	**0,08 L/m^2**

Smooth substrates and in general to increase the adhesion of following finishing cycles, especially thick ones, are treated with the solvent-free epoxy primer DUALENE EPX MS adhesion promoter, on which to perform quartz dusting.

Primer for multi-layer / thick coating	
DUALENE EPX MS	**0,3 - 0,6 kg/m^2**

SUBSTRATE PREPARATION: wet substrates

The thickness of epoxy-cement mixture depends on the moisture content in the substrate. For not fully cured screeds, the application of one roller coat of mixture is sufficient; for larger quantities, it is necessary to increase the thicknesses either with several roller passes or by making a mortar with resin/cement/quartz mixture, to be applied by trowel. Regardless of the system adopted, always verify by measurement with a hygrometer the tightness of the applied cycle.
The use of roller grout may result in obtaining a slightly pitted appearance; the intensity depends on the dilution with water and the type of roller used (less with a short hair roller).

Epoxy concrete		Yield per layer	Product yeld (+ concrete/quartz)
Grout roller			
DUALENE EPX IMC W	1000		
Concrete	1900	0,55 kg/m^2	0,18 kg/m^2
water	150		
Mortar trowel			
DUALENE EPX IMC W	1000		
Cement	1900	1,9 kg/m^2	0,4 kg/m^2
Quartz (01-03/01-05)	1500		
water	150		

SUBSTRATE PREPARATION: Tiles

Tile substrates, tiles, polished stones, etc., are surfaces that must be properly prepared so as not to compromise the final result of the protective cycle. The correct preparation of these substrates involves, after a cleaning operation, mechanical abrasion or acid etching with MONOPOL PL 06: spread it evenly covering the entire surface to be matted. The reaction is slow, the product is left to act until completely dry; wash thoroughly to remove any residual product, acid traces interfere with the primer.
Apply 1 coat of the chosen primer:
DUALENE EPX FL waterborne quartz epoxy primer.
DUALENE EPX FTR solvent-based epoxy primer.
If you subsequently have to smooth tiles to eliminate joints, attach a reinforcing mesh (insulation type) with the primer.
Use high adhesion mortars for shaving.
Applying a thin-layer finish directly on the primer where there are joints, they will remain visible.

			Diluition	Product yeld
MONOPOL PL 06	water		Ready to use	15 m^2/L
DUALENE EPX FL	water	(roller)	H_2O max 10%	0,15 kg/m^2
DUALENE EPX FTR	solvent	(roller)	Ready to use	10 m^2/L

FINISHES: impregnation treatments

When treating absorbent substrates with MONOPOL PT 03-03W by impregnation, application is done "wet-on-wet" by treating a portion of the surface and immediately applying a new coat to promote penetration (the number of passes depends on absorption).

With MONOPOL PT 04, two coats are applied the second over the previous dried coat.

With lithium silicate-based MONOPOL LIS, you should keep the substrate wet with product for approx. 30 min.

The yields are significantly affected by the porosity of the substrate.

		Diluition	Product yeld
Acrylic impregnation dustproof			
MONOPOL PT 03 W	**water**	**ready to use**	**4 m^2/L**
MONOPOL PT 03	**solvent**		
Acrylic partially film-forming treatment			
MONOPOL PT 04	**solvent**	**ready to use**	**3 - 5 m^2/L**
Lithium silicate mineral impregnantion			
MONOPOL LIS	**water**	**ready to use**	**3 - 4 m^2/L**

FINISHES: paints

Before applying the finishing paint, the substrate must have been properly treated (cleaning, primer of the chosen cycle, etc.).
Paints are always applied in at least two coats the second one over the first dried one (with epoxy finishes respect max. over-application times). They are all applicable in the supplied condition; under special conditions (weather, absorption), dilute the first coat max. 5-10% appropriately (water, thinner for epoxies/polyurethanes), the final coat should always be applied without dilution.
For the last coat, use product from a single batch to avoid possible slight color differences.

Epoxy paints		Diluition	Product yeld (2 coats)
DUALENE EPX SMT W	water		
DUALENE EPX SMT	solvent		
DUALENE EPX SMT AS high thickness	solvente	ready to use	5 m^2/L
DUALENE EPX PAV W anti-skid	water		
DUALENE EPX PAV anti-skid	solvent		
PUR paints			
DUALENE AIC SMT W	water		
DUALENE AIC SMT	solvent	ready to use	5 m^2/L
DUALENE AIC PAV W anti-skid	water		
DUALENE AIC PAV anti-skid	solvent		

FINISHES: protective varnishes

Before applying the varnish, the substrate must have been adequately treated (cleaning, possible mechanical surface roughening).
Varnishes are always applied in at least two coats, the second coat on top of the first dried one (with epoxy finishes, observe the maximum over-application times).
DUALENE AIC TRA is supplied concentrated to be diluted up to 50% with polyurethane thinner.
DUALENE EPX IMC W should be diluted according to the instructions.
The other varnishes are applicable as supplied, in special conditions (climate, absorption), dilute the first coat max. 5-10% with water, the final coat must always be applied without dilution.

		Diluition		Product yeld (2 coats)
1 K polyurethane varnish				
MONOPOL PUR TRA	**water**			
1 K acrylic varnish		**ready to use**		**5 m^2/L**
MONOPOL ACR TRA W	**water**			
2 K epoxy varnish				
DUALENE EPX IMC W	**water**	**1 coat H_2O max 100%** **2 coat H_2O max 50%**	**5 m^2/L**	**Conc 0,08 L/m^2** **Conc 0,1 L/m^2**
2 K polyurethane varnish				
DUALENE AIC TRA SW	**water**	**ready to use**		**5 m^2/L**
DUALENE AIC TRA	**solvent**	**50% PUR thinner**		**5 m^2/L (diluite)** **(Conc. 0,13 L/m^2)**

FINISHES: Thick coatings

Before applying the coating, the substrate must have been adequately treated (cleaning, primer of the chosen cycle, possible adhesion layer with DUALENE EPX MS and quartz dusting). Check that there are adequate environmental conditions to prevent the presence of external dust that could become embedded in the coating as it sets. Use footwear with crampons when working on the fresh layer.
Use product from a single batch to avoid possible slight colour differences.
To reduce dirt pick-up and facilitate cleaning, apply a protective varnish; this protection is mandatory for the cement coating with DUALENE LIC SL latex.

		Mixtur yeld	Product yeld
Waterborne epoxy self-levelling coating (for thicknesses up to 1.5-2 mm)			
DUALENE EPX SL	**1000**	**2,2 kg/m/mm^2 thickness**	**1,3 kg/m^2/mm thickeness**
Quartz 01-03	**700**		
(for thicknesses up to 2.5 mm; coarser quartz may result in a rougher surface)			
DUALENE EPX SL	**1000**	**2,4 kg/m^2/mm thickness**	**1,2 kg/m^2/mm thickness**
Quartz 01-05 mm	**1000**		
Self-levelling concrete thick coating with acrylic latex (to be protected with varnish)			
DUALENE LIC SL acqua	**530**		
Quartz 01-03	**1000**	**2 kg/m^2/mm thickness**	**0,4 kg/m^2/mm thickness**
concrete	**1000**		
to increase the mechanical strength of the mortar use concrete 42.5 N/mm			
Solvent-free, self-levelling epoxy coating (per spessori fino 1,5-2 mm)			
DUALENE EPX SL SS	**1000**	**1,7 kg/m^2/mm thickness**	**1 kg/m^2/mm thickness**
Quartz 01-03	**1000**		
Solvent-free, unfilled epoxy self-levelling coating (decorative) (max.thickness 1.5 mm)			
DUALENE EPX LAC	**1000**	**1,1kg/m^2/mm thickness**	

FINISHES: multi-layer

Before applying the cycle, the substrate must have been adequately treated (cleaning, possible abrasion, primer of the chosen cycle). The first adhesion coat is always made with DUALENE EPX MS and quartz dusting on the fresh coat. When completely dry (in any case within 24 h), vacuum off the loose filler and sand with 80/100 paper; where an intermediate layer is to be applied, carry out the same dusting, vacuuming and sanding operations.
For intermediate and final coats, spread the product by trowel and recoat with a shaved roller; alternatively, apply the product only with a medium-hair roller.
Use product from a single batch to avoid possible slight colour differences.
Below are some examples of mixes that can be made, layering, size of aggregates for filling and dusting are variable in relation to the finish required.
Consult the specific information sheet with detailed information

		Mixture yeld	Product yeld
Adhesion layer			
DUALENE EPX MS	**1000**	**0,9 kg/m^2**	**0,6 kg/m^2**
Quartz 01-05	**300/400**		
Dusting on fresh with quartz 01-05 followed by vacuuming and sanding			**ca. 3 kg/m^2**
MULTILAYER rough anti-slip 1 mm thick			
Final layer			
DUALENE EPX SL SS	**1000**		**0,6 kg/m^2**
Without filler (max. 10% quartz 01-03)			
MULTILAYER smooth max. thickness 3 mm			
Middle layer			
DUALENE EPX SL SS	**1000**	**1 kg/m^2**	**0,8 kg/m^2**
Quartz 01-03	**300/400**		
Dusting on fresh with quartz 01-03 followed by vacuuming and sanding			**ca. 3 kg/m^2**
Final layer			
DUALENE EPX SL SS	**1000**		**0,6 kg/m^2**
Without filler (max. 10% quartz 01-03, if filled the finish is slightly rough)