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## 2 K PLASTISTONE® EP-DF binding agent WE

<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ On concrete, screed and magnesite/anhydrite floors etc. with high residual moisture.</li> <li>→ For all subsoil that cannot be coated with conventional systems due to their equilibrium moisture content and respectively extruding dampness,</li> <li>→ As primer coat (+20% water as primer for EP-DF flow coatings)</li> <li>→ As early evaporation protection for concrete and screed floors. (+20% water)</li> <li>→ As EP-DF fine filler or EP-DF mortar with appropriate filler addition</li> <li>→ As primer for EP-DF fine filler and also EP-DF mortar</li> <li>→ As adhesive agent for coloured EP-DF sealings and 1-3 mm EP-DF flow coatings.</li> <li>→ Pay attention to the general advice in catalogue group 1!</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ Very high penetrating power due to low viscosity, thus ideal for dense surfaces, such as magnesite or vacuum concrete floors.</li> <li>→ Tools can be cleaned with water after usage.</li> <li>→ Long processing time of 1 to 1.5 hours depending on the bundle estimate.</li> <li>→ Drying time at 20°C approx. 16 hours, afterwards recoatable.</li> <li>→ On application as early evaporation protection, the EP-DF adhesive agent WE will immediately be applied by using a paint roller when the concrete or screed floor is accessible.</li> <li>→ <b>Not to be used as colourless sealing on coloured coatings</b> During application and drying, mind the fact that the air moisture in enclosed rooms raises due to the evaporation of the EP-DF adhesive agent's water contents. Thus ensure sufficient ventilation.</li> </ul>
<b>GISCODE:</b>	→ RE 1 (epoxy resin products, solvent-free)
<b>CE Norm:</b>	→ As per DIN EN13813: CE-label: EN 13813 SR-B3,8
<b>Resistance:</b>	→ See catalogue gr.1 chemical resistance of coating surfaces
<b>Subsurface preparation:</b>	→ See catalogue group 1 General requirements to subsurface
<b>Safety data sheets:</b>	→ On our homepage, domain Shop Articles
<b>Processing:</b>	<p><b><u>As primer / primer coat:</u></b></p> <ul style="list-style-type: none"> <li>→ Completely discharge component B into component A, and then mix with a suitable agitator for approx. 2 - 3 minutes, repot and then mix again for approx. 1 minute. As primer, add 20 % water to the A+B mixture and intermix thoroughly once more.</li> <li>→ Attention! Only add supplementary water to the premixed A+B component. It is generally recommended to cast the mixed material on the surface by using a rubber squeegee and to roll with a paint roller after approx. 15 minutes. Avoid ponding on the surface area. Nevertheless there should be a closed surface film. If you continue with a coating, the fresh priming should be broadcast with quartz sand approx. 100g /m<sup>2</sup>, size 0.1-0.4 mm or 0.3 – 0.9 mm.</li> <li>→ Attention! A manual blending of components A and B is not possible as it would not result in sufficient curing.</li> </ul>
<b>Material consumption</b>	<ul style="list-style-type: none"> <li>→ On priming subsoil (concrete, screed) approx. 300 - 500 g/m<sup>2</sup> with rubber squeegee</li> <li>→ On dense/close subsoil approx. 150 - 200 g/m<sup>2</sup> with paint roller</li> </ul>

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## 2 K PLASTISTONE® EP-DF binding agent WE

The following technical values have been achieved with adhesive agent comp. A+B. Mechanical values change when filler materials are added. Refer to the values on the following pages, depending on the sealing or the EP-DF flow coatings 1-1.5mm/1.5-2mm/2.5-3mm.

Plasti-Chemie International GmbH does not assume any liability on the application of third-party products as technical characteristics may considerably deviate.

<b>Product data:</b>	<b>Component A:</b>	<b>Component B:</b>
Viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas
Solids content:	~ 54 %	
Mix ratio PBW:	250 PBW	100 PBW
Mix ratio PBV:	250 PBV	89.3 PBV
Mixing time:	2-3 min. according to bundle size, repot and mix again for ~ 1 min.	
Density (mix):	1.10 kg / l	
Pot life at 20°C:	~ 60 min. / 300 g preparation	
Curing time at 20°C:	Curing times are being influenced by air moisture and temperature. - accessible and coatable after ~ 16 h, chargeable after ~ 48 h - fully mechanically loadable after 3-5 days, chemically loadable after approx. 7 days Curing times double with a high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception)	
Shelf life:	~ 12 months at 15°C to 25°C storage temperature, on partial preparations, comp. A must be stirred up	
Colour:	yellowish	
Cleaner for tools:	Water (if no curing has taken place)	
<b>Steam-diffusion current density:</b>	<b>Test report no. 4376 of Polymer Institute Flörsheim</b>	
Testing method as per DIN EN 7783-1: Classification as per DIN EN 1504-2: Diffusion equivalent air layer thickness m:	Rating class II class I = <5s <sub>d</sub> (m), class II = >5-50s <sub>d</sub> (m), class III = >50s <sub>d</sub> (m)	
<b>Mechanical properties:</b>	<b>Test report no. P 3835-28 of Polymer Institute Flörsheim</b>	
Shore D hardness DIN 53505:	~ 69 Shore D	
Adhesive tensile strength DIN EN 1542:	~ 3.8 N/mm <sup>2</sup> 100% crack in concrete	
Bending tensile strength DIN EN ISO 178:	> 23.9 N/mm <sup>2</sup>	
Compressive strength DIN EN ISO 604:	Compression stress, 10% strain ~ 21.7 N/mm <sup>2</sup> sample <b>not</b> destroyed Compression stress, 20% strain ~ 24.0 N/mm <sup>2</sup> sample <b>not</b> destroyed	

### Available bundle sizes 2 K EP-DF binding agent WE

Art.-no:	Content:	Bundle composition:
05 11 01 0000-X01	<b>2.5 kg</b>	Comp.A: 1.78 kg; Comp.B: 0.72 kg <span style="float: right; color: green;">in 2 K bundle</span>
05 11 01 0000-X02	<b>5.0 kg</b>	Comp.A: 3.57 kg; Comp.B: 1.43 kg <span style="float: right; color: green;">in 2 K bundle</span>
05 11 01 0000-X03	<b>12.0 kg</b>	Comp.A: 8.57 kg; Comp.B: 3.43 kg <span style="float: right; color: green;">in 2 K bundle</span>
05 11 01 0000-X04	<b>24.0 kg</b>	Comp.A: 17.14 kg; Comp.B: 6.86 kg
05 11 01 0000-X05	<b>154.0 kg</b>	Comp.A: 2*55 kg in 60 litre small barrel Comp.B: 1*44 kg in 60 litre small barrel
05 11 01 0000-X06	<b>577.0 kg</b>	Comp.A: 2*206 kg in 210 litre barrel Comp.B: 1*165 kg in 210 litre barrel
05 11 01 0000-X07	<b>2800.0 kg</b>	Comp.A: 2 x 1000 kg in 1000 litre single-use IBC Container Comp.B: 1 x 800 kg in 1000 litre single-use IBC Container

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### 3 K PLASTISTONE® EP-DF fine spatula WE

<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ As synthetically modified balancing fine putty from layer thicknesses of 0.5 to 5 mm, used in storage rooms, production halls, basement garages, etc. on concrete, screed and magnesite / anhydrite floors.</li> <li>→ Also on tiles with adequate substrate treatment and primer.</li> <li>→ Chargeable with vehicles like cars, forklifts or forklift trucks.</li> <li>→ For troweling off fine unevennesses or disruptions</li> <li>→ Or as pore closure on EP-mortar or EP-DF mortar.</li> <li>→ For substrate that cannot be coated with traditional systems due to household or oppressive humidity.</li> <li>→ Note! For quick repair (~ 30 min.) of small holes, disruptions, especially in vertical areas like steps or plinths, we recommend using the 2 comp.- polyester- spatula.</li> <li>→ Please mind the general advice in catalogue group 1!</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ EP-DF fine spatula is a dispersion that can be diluted with water, based on 2K-epoxy resin.</li> <li>→ Formulation free of benzyl alcohol and nonyle phenol</li> <li>→ Free of cement or gypsum contents (no shrinkage cracks)</li> <li>→ Very little odour</li> <li>→ Visible end of processing time</li> <li>→ Curing also on low temperatures from 10°C (object temperature)</li> <li>→ Cleaning of tools with water is possible (if no curing has taken place)</li> <li>→ EP-DF fine spatula does not contain solvents (despite water)</li> <li>→ Coating is breathable and can thus be used on substrate with increased household or oppressive humidity. Also on magnesite floors</li> <li>Fillers are only added on processing, thus no deposition due to storage</li> <li>→ For substrate that cannot be coated with traditional systems due to household or oppressive humidity.</li> <li>→ During processing and curing in closed rooms, mind that air moisture may increase due to the evaporation of water proportions of the EP-DF fine spatula. Thus ensure sufficient ventilation.</li> <li>→ Due to the evaporation of water proportions, the coating material shrinks. Thus a second spatting may be necessary after curing when spatting cracks or evening bumps.</li> </ul>
<b>Resistance:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 chemical resistance of coating surfaces</li> </ul>
<b>Subsurface preparation:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 General requirements to subsurface</li> <li>→ As primer coat, use the EP-DF binding agent, after curing the EP-DF fine spatula may be applied.</li> <li>→ When used on the EP-mortar, this one does not need priming.</li> </ul>
<b>Processing:</b>	<ul style="list-style-type: none"> <li>→ Completely discharge hardener component (B) into resin component (A) and mix with a suitable agitator for ~ 2 minutes. Then put the binding agent mix into a larger pail and slowly add the filler with the agitator running, mix ~ 1 minute; the filler quantity depends on the required texture of the EP-DF fine spatula.</li> <li>→ As the fluidity of the EP-DF fine spatula depends on temperature, the binding agent may be filled higher on higher temperatures and lower on lower temperatures.</li> <li>→ With the EP-DF fine spatula, we recommend dispersing the mixed material immediately on the surface for elongating processing time. This way it stays longer workable.</li> </ul>
<b>Material consumption</b>	<ul style="list-style-type: none"> <li>→ ~ 1.8 kg/m<sup>2</sup> per 1 mm layer thickness (theoretical consumption)</li> <li>→ Practical consumption determines surface roughness. If a milled substrate shall be filled with a milling groove depth of 2mm, material consumption is not 3.60 kg/m<sup>2</sup> but only ~ 50% - thus ~ 1.80kg/m<sup>2</sup>.</li> <li>The reason is that only the grooves need to be filled.</li> </ul>

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### 3 K PLASTISTONE® EP-DF fine spatula WE

We especially point out that the following technical values can only be achieved with components like binding agent / fillers / pigments. Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.

<b>Product data of EP-DF fine spatula WE:</b>	<b>Component A:</b>	<b>Component B:</b>
Viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas
Solids content:	~ 85 % with all fillers and pigments	
Mix ratio PBW:	2.5 PBW	1 PBW
Filler portion on comp.A+B:	200 % fillers on comp.A+B	
Mixing time:	2-3 min.	
<b>Material consumption:</b>	~ 1.8 kg/m <sup>2</sup> per 1 mm layer thickness	
Density (mix):	1.8 kg / l	
Pot life at 20°C:	~ 60 Min./ 300 g preparation Attention! Larger preparations or higher temperatures shorten pot life (processing time)	
Curing time at 20°C:	Curing times are influenced by air moisture and temperature. - accessible and coatable after ~ 16 h, chargeable after ~ 48 h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with a high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception)	
Shelf life:	~ 12 months at 15°C to 25°C storage temperature	
Colour:	grey	
Cleaner for tools:	Water (if no curing has taken place)	
<b>GISCODE:</b>	RE 1 (epoxy resin products, solvent-free)	
<b>CE Norm</b> as per DIN EN13813:	CE-label: EN 13813 SR-B3,1	
<b>Steam-diffusion current density:</b>	<b>Test report no. 4376 of Polymer Institute Flörsheim</b>	
Testing method as per DIN EN 7783-1: Classification as per DIN EN 1504-2: Diffusion equivalent air layer thickness m:	Rating class II class I = <5s <sub>d</sub> (m), class II = >5-50s <sub>d</sub> (m), class III = >50s <sub>d</sub> (m)	
<b>Mechanical properties:</b>	<b>Test report no. P 3835-29 of Polymer Institute Flörsheim</b>	
Shore D hardness DIN 53505:	~ 77 Shore D	
Adhesive tensile strength DIN EN 1542:	~ 3.1 N/mm <sup>2</sup> 100% crack in concrete	
Bending tensile strength DIN EN ISO 178:	~ 28.4 N/mm <sup>2</sup>	
Compressive strength DIN EN ISO 604:	Compression stress, 10% strain ~ 42.2 N/mm <sup>2</sup> sample <b>not</b> destroyed	

#### Available bundle sizes 3 K EP-DF fine spatula

<b>Art.-no:</b>	<b>Content:</b>	<b>Bundle composition:</b>		
		<b>Comp.A (resin)</b>	<b>Comp.B (hardener)</b>	<b>Comp.C (filler)</b>
05 03 01 0000-X08	<b>7.50 kg</b>	1.78 kg	0.72 kg	5.00 kg
05 03 01 0000-X09	<b>15.00 kg</b>	3.57 kg	1.43 kg	10.00 kg
05 03 01 0000-X10	<b>37.00 kg</b>	8.57 kg	3.43 kg	25.00 kg

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### 3 K PLASTISTONE® EP-DF mortar WE

<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ As synthetically modified levelling mortar for layer thicknesses from 5 to 50 mm in one process step, used in storage rooms, production halls, basement garages, etc. on concrete, screed and magnesite / anhydrite floors and screed surfaces.</li> <li>→ For substrate that cannot be coated with traditional systems due to household or oppressive humidity.</li> <li>→ Also on tiles with adequate substrate treatment.</li> <li>→ Chargeable with vehicles like cars, forklifts or forklift trucks.</li> <li>→ For troweling off coarse unevennesses or disruptions</li> <li>→ For subsequent installation of a floor down-grade</li> <li>→ For producing cove plinths</li> <li>→ As full-surface floor adjustment</li> <li>→ Please mind the general advice in catalogue group 1!</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ EP-DF mortar WE is a dispersion that can be diluted with water, based on 2K-epoxy resin with mineral aggregates.</li> <li>→ Formulation free of benzyl alcohol and nonyle phenol</li> <li>→ EP-DF mortar does not contain solvents (despite water), thus very little odour.</li> <li>→ Free of cement or gypsum contents (no shrinkage cracks)</li> <li>→ Visible end of processing time</li> <li>→ Due to the selected grain size of 5 different quartz sand sizes in combination with the 2 K EP-DF binding agent WE, there is a blend of ideal grading and hardening properties.</li> <li>→ EP-DF mortar hardens at 20 °C within ~ 12 h and is then grindable and coatable, as well as processible from a substrate temperature of 10 °C</li> <li>→ Cleaning of tools with water is possible (if no curing has taken place)</li> <li>→ EP-DF mortar is breathable and can thus be used on substrate with increased household or oppressive humidity. Also on magnesite floors!</li> <li>→ Fillers are only added on processing, thus no deposition due to storage.</li> <li>→ During processing and curing in closed rooms, mind that air moisture may increase due to the evaporation of water proportions of the EP-DF mortar. Thus ensure sufficient ventilation.</li> <li>→ With a high concentrated load, we recommend increasing the mix ratio of the binding agent portion to 1 PBW binding agent and 8 PBW quartz!</li> <li>→ A levelling compound on the cured mortar is recommended in order to increase surface strength.</li> </ul>
<b>Subsurface preparation:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 General requirements to subsurface</li> <li>→ For a primer coat or bonding course, use EP-DF binding agent WE as primer. Process the EP-DF mortar WE wet-in-wet together with the primer. (This improves the adhesion of the EP-DF mortar WE)</li> <li>→ If the primer (EP-DF binding agent WE) lies longer than 48 h before re-processing, slightly sand it with quartz sand 0.7-1.2mm when it is still wet.</li> <li>→ Sanding the primer has the advantage that the EP-DF mortar WE does not slip during planing.</li> </ul>
<b>Processing:</b>	<ul style="list-style-type: none"> <li>→ Completely discharge hardener component (B) into resin component (A) and mix with a suitable agitator for ~ 2 minutes. Put the mortar filler into a suitable mixing pail and add the resin / hardener mix (A+B). Mix with a compulsory mixer for about 2 – 3 minutes. Change into another pail and mix again ~ 1 minute.</li> </ul>
<b>Subsequent layers:</b>	<ul style="list-style-type: none"> <li>→ In practice it has proven that intermediate grinding after mortar curing with following pore closure or levelling compound has advantageous effects. Unevennesses are being removed and the mortar's absorptivity is being blocked which also ensures the self-levelling property of the subsequent EP-DF coating.</li> </ul>

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### 3 K PLASTISTONE® EP-DF mortar WE

We especially point out that the following technical values can only be achieved with components like binding agent / fillers / pigments. Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.

<b>Product data EP-DF mortar WE:</b>	<b>Component A:</b>	<b>Component B:</b>
Binding agent viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas
Solids content:	97 % with fillers	
Mix ratio PBW:	250 PBW	100 PBW
Mix ratio: Binding agent with quartz sand:	1 PBW binding agent with 10 PBW quartz sand mix	
Mixing time:	1-2 min. comp.A+B / 2-3 min. binding agent with quartz sand	
<b>Material consumption:</b>	~ 2.2 kg/m <sup>2</sup> per 1 mm layer, or 2.2 kg per 1 litre or 22 kg /m <sup>2</sup> for 10 mm	
Density (mix):	2.20 kg / l	
Pot life at 20°C:	~ 60 min. 300 g preparation Attention! Larger preparations or higher temperatures shorten pot life (processing time)	
Curing time at 20°C: (depending on layer thickness)	Curing times are influenced by air moisture and temperature. - accessible and coatable after ~ 12 h, chargeable after ~ 48 h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with a high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. Ensure sufficient ventilation during processing.	
Shelf life:	~ 12 months at 15°C to 25°C storage temperature	
Cleaner for tools:	Water (if no curing has taken place)	
<b>GISCODE:</b>	RE 1 (epoxy resin products, solvent-free)	
<b>CE Norm</b> as per DIN EN13813:	CE-label: EN 13813 SR-B2,2	
<b>Mechanical properties: MR: binding agent with quartz sand:</b>	<b>Test report no. P 3835-27 of Polymer Institute Flörsheim</b> <b>1 PBW binding agent with 10 PBW quartz sand mix</b>	
Adhesive tensile strength DIN EN 1542:	~ 2.20 N/mm <sup>2</sup>	
Bending tensile strength DIN EN 196-1:	~ 10.5 N/mm <sup>2</sup>	
Compression strength DIN EN 196-1:	~ 23.3 N/mm <sup>2</sup>	
<b>Mechanical properties: MR: binding agent with quartz sand:</b>	<b>Test report no. P 3835-26 of Polymer Institute Flörsheim</b> <b>1 PBW binding agent with 8 PBW quartz sand mix</b>	
Adhesive tensile strength DIN EN 1542:	~ 0.80 N/mm <sup>2</sup>	
Bending tensile strength DIN EN 196-1:	~ 10.7 N/mm <sup>2</sup>	
Compression strength DIN EN 196-1:	~ 25.5 N/mm <sup>2</sup>	

#### Available bundle sizes 3 K EP-DF mortar

Art.-no:	Content:	Bundle composition:		
		Comp.A (resin)	Comp.B (hardener)	Comp.C (filler)
05 04 01 0000-X11	<b>27.50 kg</b>	1.78 kg	0.72 kg	25.00 kg
05 04 01 0000-X12	<b>55.00 kg</b>	3.57 kg	1.43 kg	2 x 25.00 kg
05 04 01 0000-X13	<b>137.00 kg</b>	8.57 kg	3.43 kg	5 x 25.00 kg
05 04 01 0000-X14	<b>6327.00 kg</b>	2 x 206 kg	1 x 165 kg	230 x 25.00 kg

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## 4 K PLASTISTONE® EP-DF sealing WE, coloured

<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ As coloured top sealing on concrete and screed floors and other mineral substrates.</li> <li>→ Due to its good vapour diffusion properties, the EP-DF sealing can also be applied on magnesite screeds and other problematic substrates.</li> <li>→ Everywhere where there are already even substrates and the corresponding capacity or stability of the subsoil for the expected loads already exists.</li> <li>→ On high mechanical concentrated loads, like with forklift traffic, an EP-DP self-levelling coating starting from 2 mm is to be preferred. Or the sealing is being applied in several (3-4 minimum) layers with intermediate sanding on the entire surface.</li> <li>→ Please mind the general advice in catalogue group 1!</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ EP-sealing does not contain solvents (despite water), thus very little odour.</li> <li>→ The surface is silk-mat and according to processing slightly coarse or non-slip.</li> <li>→ Can be processed in thicker layers, e.g. with a rubber squeegee.</li> <li>→ Available in 26 different standard colour shades.</li> <li>→ On light colour shades like RAL 1001/1002/1014/1021/9010, you should add the double amount of colour powder. (increase from 1 bag to two)</li> <li>→ During processing and curing in closed rooms, mind that air moisture may increase due to the evaporation of water proportions of the EP-DF binding agent. Thus ensure sufficient ventilation. (Otherwise there is a risk of curing disturbances or staining)</li> <li>→ By full-surface dispersal with colour chips of the elastic sealing and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness.</li> <li>→ With a chips quantity of up to ~ 0.20kg/m<sup>2</sup>, you can work with a single colourless sealing. Starting from 0.20kg/m<sup>2</sup>, you should reckon two process steps according to the sealing product.</li> <li>→ Suitable sealings are 2K EP-sealing WE or the 2K PU-sealing WE mat.</li> <li>→ For vehicle garages, you should not use the 2K PU-sealing as there is an increased risk of plasticizer discoloration.</li> </ul>
<b>GISCODE:</b>	→ RE 1 (epoxy resin products, solvent-free)
<b>CE Norm:</b>	→ As per DIN EN13813: CE-label: EN 13813 SR-AR1-B3,9-IR8
<b>Safety data sheets:</b>	→ On our homepage, domain Shop Articles
<b>Resistance:</b>	→ See catalogue group 1 chemical resistance of coating surfaces
<b>Subsurface preparation:</b>	→ See catalogue group 1 General requirements to subsurface
<b>Processing:</b>	<ul style="list-style-type: none"> <li>→ Stir the colour pigment for about 1 minute into component A by using a suitable agitator, then completely discharge component B into component A and mix for about 1 min. Then change the material into a larger pail and slowly add the filler with the agitator slowly running, mix ~ 1 min.</li> <li>→ Attention! Manual mixing of component A and B is not possible as this would not result in sufficient curing.</li> <li>→ Add a maximum of 5% water to the basic or top coat if necessary.</li> <li>→ Processing with a rubber squeegee ensures a close impregnation of the subsoil which often replaces an additional leveling compound.</li> <li>→ For achieving an even grain, seamless rolling is necessary. Irregular application leads to streaking.</li> <li>→ Best results on a coloured paint are being achieved when using a 25 cm paint roller or on larger surfaces with a rubber squeegee. At the latest after 15 min. re-work without additional material with a 50 cm paint roller overlapping and seamless in one direction.</li> </ul>



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## 4 K PLASTISTONE® EP-DF sealing WE, coloured

We especially point out that the following technical values can only be achieved with components like binding agent / fillers / pigments. Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.

<b>Product data:</b>	<b>Component A:</b>	<b>Component B:</b>			
Viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas			
Solids content:	~ 71 % with fillers and pigments				
Mix ratio PBW:	250 PBW	100 PBW			
Filler addition on comp.A and comp.B:	6 % colour pigment and 50 % filler on comp.A+B				
Mixing time:	2 - 4 min.				
<b>Material consumption:</b>	As sealing, the first coat as primer ~ 0.35 – 0.45 kg / m <sup>2</sup> and two more coats as top coat with each ~ 0.30 – 0.40 kg / m <sup>2</sup> . 2 Applications with rubber squeegee, each 400g-500g / m <sup>2</sup>				
Density (mix):	1.30 kg / l				
Pot life at 20°C:	~ 60 min. / 300g preparation. Attention! Larger preparations or higher temperatures shorten pot life (processing time)				
Curing time at 20°C:	Curing times are influenced by air moisture and temperature. - accessible after ~ 16 h, coatable after ~ 24 h, chargeable after ~ 48h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. Ensure sufficient ventilation during processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception)				
Shelf life:	~ 12 months at 15°C to 25°C storage temperature				
Colour:	Acc. to colour chart				
Cleaner for tools:	Water (if no initial curing has taken place)				
<b>Steam-diffusion current density:</b>	<b>Test report no. 4376 of Polymer Institute Flörsheim</b>				
method as per DIN EN 7783-1: Classification as per DIN EN 1504-2: Diffusion equivalent air layer thickness m:	Rating class II class I = <5s <sub>d</sub> (m), class II = >5-50s <sub>d</sub> (m), class III = >50s <sub>d</sub> (m)				
<b>Mechanical properties:</b>	<b>Test report no. P 3835-37 of Polymer Institute Flörsheim</b>				
Shore D hardness DIN 53505:	~ 79 Shore D				
Adhesive tensile strength DIN EN 1542:	~ 3.9 N/mm <sup>2</sup> 100% crack in concrete				
Bending tensile strength DIN EN ISO 178:	~ 28.0 N/mm <sup>2</sup>				
Compressive strength DIN EN ISO 604:	Compression stress, 10% strain ~ 32.4 N/mm <sup>2</sup> sample <b>not</b> destroyed Compression stress, 20% strain ~ 38.0 N/mm <sup>2</sup> sample destroyed				
Abrasion resistance DIN EN ISO 5470-1	(Taber) ~ 77 mg/1000 U				
Impact resistance DIN EN ISO 6272	≤ 8 Nm				
<b>On customer request 7.80 kg and 18.72 kg bundles are available pigmented!</b>					
<b>Available bundle sizes 4 K EP-DF sealing coloured, standard</b>					
<b>Art.-no:</b>	<b>Bundle content:</b>	<b>Bundle composition:</b>			
	<b>Comp. A+B+C+D</b>	<b>Comp.A (resin)</b>	<b>Comp.B (hardener)</b>	<b>Comp.C (filler sealing)</b>	<b>Comp.D (pigment powder)</b>
051201+RAL Nr.-X15	<b>7.80 kg</b>	3.57 kg	1.43 kg	2.50 kg	0.30 kg
051201+RAL Nr.-X16	<b>18.72 kg</b>	8.57 kg	3.43 kg	6.00 kg	0.72 kg
051201+RAL Nr.-X17	<b>899.56 kg</b>	2 x 206 kg	1 x 165 kg	48 x 6.00 kg	48 x 0.72 kg

Technical data sheet date 01.10.2010

## 4 K PLASTISTONE® EP-DF self-levelling coating WE 1.0 – 1.5 mm

<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ As coloured, self-levelling thin coating for production halls, warehouses, garages on concrete, screed and magnesite as well as anhydrite substrates (tiles after appropriate preparation).</li> <li>→ Application with light traffic by forklifts and electric pallet trucks. A total weight of 2.5t max should not be surpassed.</li> <li>→ Can also be used in exterior areas, good UV-resistance but no 100 % colour stability (we recommend chips interspersal on the entire surface).</li> <li>→ For substrate that cannot be coated with traditional systems due to household or oppressive humidity.</li> <li>→ Before treating fresh concrete and screed floors, wait 10 days minimum. Then these floors can be coated with this system after having the m prepared by shot-blasting.</li> <li>→ Please mind the general advice in catalogue group 1!</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ Self-levelling from a layer thickness of 1.0 mm (acc. to substrate and at 20°C)</li> <li>→ Self-levelling (do not process with direct solar radiation)</li> <li>→ Available in 26 different standard colour shades. Colour pigment and fillers are only added during processing which results in a high flexibility for storage and application.</li> <li>→ After the EP-DF self-levelling coating has cured, apply a single-layer, thin sealing by using EP-sealing WE. In combination with anti-slip grit, a slip-resistant surface can be achieved.</li> <li>→ For achieving a mat surface, the 2 K PU-sealing WE is applied in one process step or the polymer emulsion in two layers undiluted.</li> <li>→ In visual areas, like entrance halls, staircases, exposition halls, offices, where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m<sup>2</sup> colour chips onto the fresh self-levelling coating as additional protection. After curing, apply an additional sealer.</li> <li>→ During processing and curing in closed rooms, mind that air moisture may increase due to the evaporation of water proportions of the EP-DF binding agent. Thus ensure sufficient ventilation. (Otherwise there is a risk of curing disturbances or staining)</li> <li>→ For vehicle garages, you should not use the 2K PU-sealing as there is an increased risk of plasticizer discoloration.</li> </ul>
<b>GISCODE:</b>	→ RE 1 (epoxy resin products, solvent-free)
<b>CE Norm:</b>	→ As per DIN EN13813: CE-label: EN 13813 SR-AR1-B4,1-IR8
<b>Safety data sheets:</b>	→ On our homepage, domain Shop Articles
<b>Resistance:</b>	→ See catalogue group 1 chemical resistance of coating surfaces
<b>Subsurface preparation:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 General requirements to subsurface</li> <li>→ Use the EP-DF binding agent as primer coat on the surface.</li> <li>→ It is essential that the primer coat forms a closed film on the surface. If there is no leveling compound as intermediate layer, repeat work step “priming” on very absorptive substrates. An insufficiently blocked substrate may cause blistering in the upper coating. For unevennesses up to ~ 5 mm, the EP/DF-fine spatula can be used.</li> <li>→ We recommend a levelling compound as intermediate layer with ~ 1.0 kg/m<sup>2</sup>, as smaller warpings show in the upper layer of a thin coating. On deep disruptions, the EP/DF-mortar or EP-mortar can be used (the EP-DF primer must have cured!).</li> </ul>
<b>Processing:</b>	<ul style="list-style-type: none"> <li>→ Stir the colour pigment for about 1 minute into component A by using a suitable agitator, then completely discharge component B into component A and mix for about 1 min. Then change the material into a larger pail and slowly add the filler with the agitator slowly running, mix ~ 1 min.</li> <li>→ Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller.</li> </ul>

Technical data sheet date 01.10.2010

**4 K PLASTISTONE® EP-DF self-levelling coating WE 1.0 – 1.5 mm**

We especially point out that the following technical values can only be achieved with components like binding agent / fillers / pigments. Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.

<b>Product data:</b>	<b>Component A:</b>	<b>Component B:</b>			
Viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas			
Solids content:	~ 78 % with fillers and pigments				
Mix ratio PBW:	250 PBW	100 PBW			
Filler addition on comp.A and comp.B:	6 % colour pigment and 100 % fillers on comp. A+B				
Mixing time:	3 min. minimum				
<b>Material consumption:</b>	Practical consumption with trowel toothing: no. 20 max. 2.0 kg/m <sup>2</sup> = 1.25 mm no. 23 max. 2.5 kg/m <sup>2</sup> = 1.56 mm				
Density (mix):	1.60 kg / l				
Pot life at 20°C:	~ 60 min. / 300 g prep. Attention! Larger preparations or higher temperatures shorten pot life (processing time)				
Curing time at 20°C:	Curing times are influenced by air moisture and temperature. - accessible after ~ 16 h, coatable after ~ 24 h, chargeable after ~ 48h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. Ensure sufficient ventilation during processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception)				
Shelf life:	~ 12 months at 15°C to 25°C storage temperature				
Colour:	Acc. to colour chart				
Cleaner for tools:	Water (if no initial curing has taken place)				
<b>Steam-diffusion current density:</b>	<b>Test report no. 4376 of Polymer Institute Flörsheim</b>				
method as per DIN EN 7783-1: Classification as per DIN EN 1504-2: Diffusion equivalent air layer thickness m:	Rating class II class I = <5s <sub>d</sub> (m), class II = >5-50s <sub>d</sub> (m), class III = >50s <sub>d</sub> (m)				
<b>Mechanical properties:</b>	<b>Test report no. P 3835-39 of Polymer Institute Flörsheim</b>				
Shore D hardness DIN 53505:	~ 76 Shore D				
Adhesive tensile strength DIN EN 1542:	~ 4.1 N/mm <sup>2</sup> 100% crack in concrete				
Bending tensile strength DIN EN ISO 178:	~ 25.9 N/mm <sup>2</sup>				
Compressive strength DIN EN ISO 604:	Compression stress, 10% strain ~ 32.9 N/mm <sup>2</sup> sample <b>not</b> destroyed Compression stress, 20% strain ~ 38.0 N/mm <sup>2</sup> sample destroyed				
Abrasion resistance DIN EN ISO 5470-1	(Taber) ~ 78 mg/1000 U				
Impact resistance DIN EN ISO 6272	≤ 8 Nm				
<b>On customer request 10.30 kg and 24.72 kg bundles are available pigmented!</b>					
<b>Available bundle sizes 4 K EP-DF self-levelling coating 1.0 – 1.5 mm, standard</b>					
<b>Art.-no:</b>	<b>Bundle size:</b>	<b>Bundle composition:</b>			
	<b>Comp. A+B+C+D</b>	<b>Comp.A (resin)</b>	<b>Comp.B (hardener)</b>	<b>Comp.C (filler for 1.0-1.5mm)</b>	<b>Comp.D (pigment powder)</b>
051301+RAL Nr.-X18	<b>10.30 kg</b>	3.57 kg	1.43 kg	5.0 kg	0.30 kg
051301+RAL Nr.-X19	<b>24.72 kg</b>	8.57 kg	3.43 kg	12.00 kg	0.72 kg
051301+RAL Nr.-X20	<b>1187.56 kg</b>	2x 206 kg	1x 165 kg	48x 12.00 kg	48x 0.72 kg

Technical data sheet date 01.10.2010

## 4 K PLASTISTONE® EP–DF self-levelling coating WE 1.5 – 2.0 mm

<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ As coloured, self-levelling thin coating for production halls, warehouses, garages on concrete, screed and magnesite as well as anhydrite substrates (tiles after appropriate preparation.</li> <li>→ From layer thicknesses of 2 mm, this coating is suitable for vehicular traffic like forklift trucks (4 wheel version) with loads up to 3.5t.</li> <li>→ Can also be used in exterior areas, good UV-resistance but no 100 % colour stability (we recommend chips interspersal on the entire surface).</li> <li>→ For substrate that cannot be coated with traditional systems due to household or oppressive humidity.</li> <li>→ Before treating fresh concrete and screed floors, wait 10 days minimum. Then these floors can be coated with this system after having the m prepared by shot-blasting.</li> <li>→ Please mind the general advice in catalogue group 1!</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ Self-levelling from a layer thickness of 1.5 mm (from 2.5kg/m<sup>2</sup> at 20°C)</li> <li>→ Self-levelling (do not process with direct solar radiation)</li> <li>→ Available in 26 different standard colour shades. Colour pigment and fillers are only added during processing which results in a high flexibility for storage and application.</li> <li>→ After the EP-DF self-levelling coating has cured, apply a single-layer, thin sealing by using EP-sealing WE. In combination with anti-slip grit, a slip-resistant surface can be achieved.</li> <li>→ For achieving a mat surface, the 2 K PU-sealing WE is applied in one process step or the polymer emulsion in two layers undiluted.</li> <li>→ In visual areas, like entrance halls, staircases, exposition halls, offices, where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m<sup>2</sup> colour chips onto the fresh self-levelling coating as additional protection. After curing, apply an additional sealer.</li> <li>→ During processing and curing in closed rooms, mind that air moisture may increase due to the evaporation of water proportions of the EP-DF binding agent. Thus ensure sufficient ventilation. (Otherwise there is a risk of curing disturbances or staining)</li> <li>→ For vehicle garages, you should not use the 2K PU-sealing as there is an increased risk of plasticizer discoloration.</li> </ul>
<b>GISCODE:</b>	→ RE 1 (epoxy resin products, solvent-free)
<b>CE Norm:</b>	→ As per DIN EN13813: CE-label: EN 13813 SR-AR1-B3,6-IR8
<b>Safety data sheets:</b>	→ On our homepage, domain Shop Articles
<b>Resistance:</b>	→ See catalogue group 1 chemical resistance of coating surfaces
<b>Subsurface preparation:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 General requirements to subsurface</li> <li>→ Use the EP-DF binding agent as primer coat on the surface.</li> <li>→ It is essential that the primer coat forms a closed film on the surface. If there is no leveling compound as intermediate layer, repeat work step “priming” on very absorptive substrates. An insufficiently blocked substrate may cause blistering in the upper coating. For unevennesses up to ~ 5 mm, the EP/DF-fine spatula can be used.</li> <li>→ We recommend a levelling compound as intermediate layer with ~ 1.0 kg/m<sup>2</sup>, as smaller warpings show in the upper layer of a thin coating. On deep disruptions, the EP/DF-mortar or EP-mortar can be used (the EP-DF primer must have cured!).</li> </ul>
<b>Processing:</b>	→ Stir the colour pigment for about 1 minute into component A by using a suitable agitator, then completely discharge component B into component A and mix for about 1 min. Then change the material into a larger pail and slowly add the filler with the agitator slowly running, mix ~ 1 min. Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller.

Technical data sheet date 01.10.2010

**4 K PLASTISTONE® EP-DF self-levelling coating WE 1.5 – 2.0 mm**

We especially point out that the following technical values can only be achieved with components like binding agent / fillers / pigments. Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.

<b>Product data:</b>	<b>Component A:</b>	<b>Component B:</b>			
Viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas			
Solids content:	~ 82 % with fillers and pigments				
Mix ratio PBW:	250 PBW	100 PBW			
Filler addition on comp.A and comp.B:	6 % colour pigment and 150 % fillers on comp. A+B				
Mixing time:	3 min. minimum				
<b>Material consumption:</b>	trowel toothing no. 20 max. 2.5 kg/m <sup>2</sup> = 1.52 mm, no.23 max. 2.8 kg/m <sup>2</sup> = 1.7 mm, no.25 max. 3.4 kg / m <sup>2</sup> = 2.1 mm				
Density (mix):	1.65 kg / l				
Pot life at 20°C:	~ 60 min. / 300 g prep. Attention! Larger preparations or higher temperatures shorten pot life (processing time)				
Curing time at 20°C:	Curing times are influenced by air moisture and temperature. - accessible after ~ 16 h, coatable after ~ 24 h, chargeable after ~ 48h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. Ensure sufficient ventilation during processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception)				
Shelf life:	~ 12 months at 15°C to 25°C storage temperature				
Colour:	Acc. to colour chart				
Cleaner for tools:	Water (if no initial curing has taken place)				
<b>GISCODE:</b>	RE 1 (epoxy resin products, solvent-free)				
<b>CE Norm</b> as per DIN EN13813:	CE-label: EN 13813 SR-AR1-B3,6-IR8				
<b>Steam-diffusion current density:</b>	<b>Test report no. 4376 of Polymer Institute Flörsheim</b>				
method as per DIN EN 7783-1: Classification as per DIN EN 1504-2: Diffusion equivalent air layer thickness m:	Rating class II class I = <5s <sub>d</sub> (m), class II = >5-50s <sub>d</sub> (m), class III = >50s <sub>d</sub> (m)				
<b>Mechanical properties:</b>	<b>Test report no. P 3835-40 of Polymer Institute Flörsheim</b>				
Shore D hardness DIN 53505:	~ 81 Shore D				
Adhesive tensile strength DIN EN 1542:	~ 3.6 N/mm <sup>2</sup> 100% crack in concrete				
Bending tensile strength DIN EN ISO 178:	~ 20.8 N/mm <sup>2</sup>				
Compressive strength DIN EN ISO 604:	Compression stress, 12% strain ~ 29.7 N/mm <sup>2</sup> sample <b>not</b> destroyed				
Abrasion resistance DIN EN ISO 5470-1	(Taber) ~ 78 mg/1000 U				
Impact resistance DIN EN ISO 6272	≤ 8 Nm				
<b>On customer request 12.80 kg and 30.72 kg bundles are available pigmented!</b>					
<b>Available bundle sizes 4 K EP-DF self-levelling coating 1.5 – 2.0 mm, standard</b>					
<b>Art.-no:</b>	<b>Bundle size:</b>	<b>Bundle composition:</b>			
	<b>Comp. A+B+C+D</b>	<b>Comp.A (resin)</b>	<b>Comp.B (hardener)</b>	<b>Comp.C (filler for 1.5-2.0 mm)</b>	<b>Comp.D (pigment powder)</b>
051401+RAL Nr.-X21	<b>12.80 kg</b>	3.57 kg	1.43 kg	7.50 kg	0.30 kg
051401+RAL Nr.-X22	<b>30.72 kg</b>	8.57 kg	3.43 kg	18.00 kg	0.72 kg
051401+RAL Nr.-X23	<b>1475.56 kg</b>	2x 206 kg	1x 165 kg	48x 18.00 kg	48x 0.72 kg

Please note that no liability of the manufacturer can be deduced notably from the content of these technical data sheets as application and processing are outside our sphere of influence. All prices quoted plus legal VAT. Delivery and benefits exclusively based on our general terms and conditions.

Technical data sheet date 01.10.2010

## 4 K PLASTISTONE® EP–DF self-levelling coating WE 2.5 – 3.0 mm

<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ As coloured, self-levelling thick coating for production halls, warehouses, garages on concrete, screed and magnesite as well as anhydrite substrates (tiles after appropriate preparation.</li> <li>→ Suitable for heavy-duty vehicular traffic, pallet trucks (4 wheel version) with high concentrated loads up to 6 t.</li> <li>→ Can also be used in exterior areas, good UV-resistance but no 100 % colour stability (we recommend chips interspersal on the entire surface).</li> <li>→ For substrate that cannot be coated with traditional systems due to household or oppressive humidity.</li> <li>→ Before treating fresh concrete and screed floors, wait 10 days minimum. Then these floors can be coated with this system after having the m prepared by shot-blasting.</li> <li>→ Please mind the general advice in catalogue group 1!</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ Self-levelling from a layer thickness of 2.5 mm (from 4.5kg/m<sup>2</sup> at 20°C)</li> <li>→ Self-levelling (do not process with direct solar radiation)</li> <li>→ Available in 26 different standard colour shades. Colour pigment and fillers are only added during processing which results in a high flexibility for storage and application.</li> <li>→ After the EP-DF self-levelling coating has cured, apply a single-layer, thin sealing by using EP-sealing WE. In combination with anti-slip grit, a slip-resistant surface can be achieved.</li> <li>→ For achieving a mat surface, the 2 K PU-sealing WE is applied in one process step or the polymer emulsion in two layers undiluted.</li> <li>→ In visual areas, like entrance halls, staircases, exposition halls, offices, where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m<sup>2</sup> colour chips onto the fresh self-levelling coating as additional protection. After curing, apply an additional sealer.</li> <li>→ During processing and curing in closed rooms, mind that air moisture may increase due to the evaporation of water proportions of the EP-DF binding agent. Thus ensure sufficient ventilation. (Otherwise there is a risk of curing disturbances or staining)</li> <li>→ For vehicle garages, you should not use the 2K PU-sealing as there is an increased risk of plasticizer discoloration.</li> </ul>
<b>GISCODE:</b>	→ RE 1 (epoxy resin products, solvent-free)
<b>CE Norm:</b>	→ As per DIN EN13813: CE-label: EN 13813 SR-AR1-B4,1-IR8-B <sub>II</sub> -s1
<b>Safety data sheets:</b>	→ On our homepage, domain Shop Articles
<b>Resistance:</b>	→ See catalogue group 1 chemical resistance of coating surfaces
<b>Subsurface preparation:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 General requirements to subsurface</li> <li>→ Use the EP-DF binding agent as primer coat on the surface.</li> <li>→ It is essential that the primer coat forms a closed film on the surface. If there is no leveling compound as intermediate layer, repeat work step “priming” on very absorptive substrates. An insufficiently blocked substrate may cause blistering in the upper coating. For unevennesses up to ~ 5 mm, the EP/DF-fine spatula can be used.</li> <li>→ We recommend a levelling compound as intermediate layer with ~ 1.0 kg/m<sup>2</sup>, as smaller warpings show in the upper layer of a thin coating. On deep disruptions, the EP/DF-mortar or EP-mortar can be used (the EP-DF primer must have cured!).</li> </ul>
<b>Processing:</b>	→ Stir the colour pigment for about 1 minute into component A by using a suitable agitator, then completely discharge component B into component A and mix for about 1 min. Then change the material into a larger pail and slowly add the filler with the agitator slowly running, mix ~ 1 min. Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller.

Technical data sheet date 01.10.2010

**4 K PLASTISTONE® EP-DF self-levelling coating WE 2.5 – 3.0 mm**

We especially point out that the following technical values can only be achieved with components like binding agent / fillers / pigments. Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.

<b>Product data:</b>	<b>Component A:</b>	<b>Component B:</b>			
Viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas			
Solids content:	~ 82 % with fillers and pigments				
Mix ratio PBW:	250 PBW	100 PBW			
Filler addition on comp.A and comp.B:	6 % colour pigment and 208 % fillers on comp. A+B				
<b>Material consumption:</b>	trowel toothing no. 25 max. 4.5 kg/m <sup>2</sup> = 2.5 mm trowel toothing no.78 max. 5.4 kg/m <sup>2</sup> =3.0mm				
Density (mix):	1.80 kg / l				
Pot life at 20°C:	~ 60 min. / 300 g preparation				
Curing time at 20°C:	Curing times are influenced by air moisture and temperature. - accessible after ~ 16 h, coatable after ~ 24 h, chargeable after ~48h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. Ensure sufficient ventilation during processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception)				
Shelf life:	~ 12 months at 15°C to 25°C storage temperature				
Colour:	Acc. to colour chart				
Cleaner for tools:	Water (if no initial curing has taken place)				
<b>GISCODE:</b>	RE 1 (epoxy resin products, solvent-free)				
<b>CE Norm</b> as per DIN EN13813:	CE-label: EN 13813 SR-AR1-B4,1-IR8-B <sub>fl</sub> -s1				
<b>Steam-diffusion current density:</b>	<b>Test report no. 4376 of Polymer Institute Flörsheim</b>				
method as per DIN EN 7783-1: Classification as per DIN EN 1504-2: Diffusion equivalent air layer thickness m:	Rating class II class I = <5s <sub>d</sub> (m), class II = >5-50s <sub>d</sub> (m), class III = >50s <sub>d</sub> (m)				
<b>Fire behaviour:</b>	<b>Material research laboratory (MPA), Stuttgart</b>				
As per DIN 4102 (D - Norm):	Test report no. 16-9012110-DF / fire class: DIN4102-B1				
As per DIN EN 13501-1 (EU - Norm)	Classification report no.16-9012110-80 DF / fire class: B <sub>fl</sub> -s1				
<b>Mechanical properties:</b>	<b>Test report no. P 3835-41 of Polymer Institute Flörsheim</b>				
Shore D hardness DIN 53505:	~ 81 Shore D				
Adhesive tensile strength DIN EN 1542:	~ 4.1 N/mm <sup>2</sup> 92 % crack in concrete				
Bending tensile strength DIN EN ISO 178:	~ 23.7 N/mm <sup>2</sup>				
Compressive strength DIN EN ISO 604:	Compression stress, 12% strain ~ 36.2 N/mm <sup>2</sup>				
Abrasion resistance DIN EN ISO 5470-1	(Taber) ~ 66 mg/1000 U				
Impact resistance DIN EN ISO 6272	≤ 8 Nm				
<b>On customer request 15.70 kg and 37.72 kg bundles are available pigmented!</b>					
<b>Available bundle sizes 4 K EP-DF self-levelling coating 2.5 – 3.0 mm, standard</b>					
<b>Art.-no:</b>	<b>Bundle size:</b>	<b>Bundle composition:</b>			
	<b>Comp. A+B+C+D</b>	<b>Comp.A (resin)</b>	<b>Comp.B (hardener)</b>	<b>Comp.C (filler 2.5-3.0 mm)</b>	<b>Comp.D (pigment powder)</b>
051501+RAL Nr.-X24	<b>15.70 kg</b>	3.57 kg	1.43 kg	10.40 kg	0.30 kg
051501+RAL Nr.-X25	<b>37.72 kg</b>	8.57 kg	3.43 kg	25.00 kg	0.72 kg
051501+RAL Nr.-X26	<b>1817.56 kg</b>	2x 206 kg	1x 165 kg	48x 25.00 kg	48x 0.72 kg

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Technical data sheet date 01.10.2010

<b>4 K PLASTISTONE® EP–DF self-levelling coating WE conductive 1.5 – 2.0 mm</b>		
<b>Application areas:</b>	→ →	As coloured, self-levelling, conductive coating for production halls, warehouses, computer cabinets, department stores, hospitals, garages, food-processing companies on concrete, screed and magnesite as well as anhydrite substrates. Furthermore in bottling companies, everywhere where combustible gas/air mixtures or flammable liquids are being used or where electrostatic charging of floor surfaces is to be omitted.
<b>Properties:</b>	→ → → → →	Discharge resistance amounts to $10^4$ to $10^6$ Ohm in cured condition. Coating is breathable and can thus be used on substrates with increased household or oppressive humidity. Also on magnesite floors. Suitable for forklifts and pallet trucks, available in 26 different standard colour shades Total layer thickness 1.5 - 2 mm in 4 process steps (with maintenance emulsion) Trafficable 3 days after application of the top layer at 20 °C
<b>GISCODE:</b>	→	RE 1 (epoxy resin products, solvent-free)
<b>CE Norm:</b>	→	As per DIN EN13813: CE-label: EN 13813 SR-AR1-B3,5-IR16
<b>Safety data sheets:</b>	→	On our homepage, domain Shop Articles
<b>Resistance:</b>	→	See catalogue group 1 chemical resistance of coating surfaces
<b>Subsurface preparation: (Primer)</b>	→ → → → →	See catalogue group 1 General requirements to subsurface Use the EP-DF binding agent as primer coat on the surface. It is essential that the primer coat forms a closed film on the surface. If there is no leveling compound as intermediate layer, repeat work step “priming” on very absorptive substrates. An insufficiently blocked substrate may cause blistering in the upper coating. For unevennesses up to ~ 5 mm, the EP/DF-fine spatula can be used. We recommend a levelling compound as intermediate layer with ~ 1.0 kg/m <sup>2</sup> , as smaller warpings show in the upper layer of a thin coating. On deep disruptions, the EP/DF-mortar or EP-mortar can be used (the EP-DF primer must have cured!). Now the surface’s evenness should be verified once more and intermediate grinding be effected if necessary, as warpings have negative effects on conductivity. <i>Attention!! Do not sand intermediate layers!!!!</i>
<b>Copper strips:</b>	→ → →	Now the self-adhesive copper strips are pasted onto the floor with a distance or grid of ~ 5 * 5 m. On small surfaces up to ~ 100 m <sup>2</sup> , 2-4 strings in fan shape are sufficient - on the floor with a length of ~ 1 m and drawn up on the wall about 30 cm. Make sure you have cleaned these areas with acetone or something similar beforehand. Press on the copper strips with a cloth. The free ends of the copper strips need to be drawn up vertically about 30 cm on the walls and connected by an electrician to the ring line or directly fixed on a ground terminal.
<b>EP-conductive lacquer:</b>	→	<b>Processing:</b> See technical data sheet group 5
<b>Processing of EP-DF self-levelling coating conductive</b>	→ → → →	Stir the colour pigment for about 1 minute into component A by using a suitable agitator, then completely discharge component B into component A and mix for about 1 min. Then change the material into a larger pail and slowly add the filler with the agitator slowly running, mix ~ 1 min. Discharge the mix onto the surface, disperse with toothed trowel no. 25 and immediately purge with a spiked roller in one direction. Good purging with the spiked roller results in additional dispersal of the fibres. It is absolutely necessary to comply with the material consumption of 2.5 (1.6 mm) to 3.5 (2.0 mm) kg/m <sup>2</sup> so that conductance values are not being affected. As conductive fibres are black and copper strips may be visible as shadow on the surface, we recommend using colour chips - ~ 20 g/m <sup>2</sup> - especially with bright colours – but not more than 50 g/m <sup>2</sup> . As soiling prevention, the coating must be treated 2 times with 1 Comp. Polymer emulsion before the first utilisation.



Technical data sheet date 01.10.2010

**4 K PLASTISTONE® EP-DF self-levelling coating WE conductive  
1.5 – 2.0 mm**

<b>Product data:</b>	<b>Component A:</b>	<b>Component B:</b>			
Viscosity at 23 °C:	~ 180 mPas	~ 1150 mPas			
Solids content:	~ 82 % with fillers and pigments				
Mix ratio PBW:	250 PBW	100 PBW			
Filler addition on comp.A and comp.B:	6 % colour pigment and 150 % fillers on comp. A+B				
<b>Material consumption:</b>	Practical cons.: trowel toothing no.23 2.8-3.0 kg/m <sup>2</sup> =1.7-1.8 mm				
Density (mix):	1.65 kg / l				
Pot life at 20°C:	~ 60 min. / 300 g preparation. Attention! Larger preparations or higher temperatures shorten pot life (processing time)				
Curing time at 20°C:	Curing times are influenced by air moisture and temperature. - accessible after ~ 16 h, coatable after ~ 24 h, chargeable after ~48h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. Ensure sufficient ventilation during processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception.				
Shelf life:	~ 12 months at 15°C to 25°C storage temperature				
Colour:	Acc. to colour chart				
Cleaner for tools:	Water (if no initial curing has taken place)				
<b>Steam-diffusion current density:</b>	<b>Test report no. 4376 of Polymer Institute Flörsheim</b>				
method as per DIN EN 7783-1: Classification as per DIN EN 1504-2: Diffusion equivalent air layer thickness m:	Rating class II Klasse I = <5s <sub>d</sub> (m), Klasse II = >5-50s <sub>d</sub> (m), Klasse III = >50s <sub>d</sub> (m)				
<b>Mechanical properties:</b>	<b>Test report no. P 3835-30a of Polymer Institute Flörsheim</b>				
Shore D hardness DIN 53505:	~ 70 Shore D				
Adhesive tensile strength DIN EN 1542:	~ 3.5 N/mm <sup>2</sup> 100% crack in concrete				
Bending tensile strength DIN EN ISO 178:	~ 25.1 N/mm <sup>2</sup>				
Compressive strength DIN EN ISO 604:	Compression stress, 10% strain ~ 34.6 N/mm <sup>2</sup> sample <b>not</b> destroyed				
Abrasion resistance DIN EN ISO 5470-1	(Taber) ~ 90 mg/1000 U				
Impact resistance DIN EN ISO 6272	≤ 16 Nm				
<b>Electrostatic properties:</b>	<b>DIN EN 1081 / measuring voltage 100 V</b>				
Discharge resistance DIN EN 1081	between 10 <sup>4</sup> Ohm and 10 <sup>6</sup> Ohm (see test report)				
<b>System fulfils standards of DIN EN 61340 as ESD protection zone and for person earthing</b>					
<b>Technical requirements:</b>	<b>Results as per DIN EN 61340</b>				
ESD protection zone: < 10 <sup>9</sup> MOhm Discharge resistance DIN EN 61340-4-1	< 0.1 MOhm bzw.(< 10 <sup>5</sup> Ohm), see test report				
Person earthing: <100 V max. voltage Shoe-walking test DIN EN 61340-4-5	≤ 100 V max. voltage				
<b>On customer request 12.806 kg and 30.735 kg bundles are available pigmented!</b>					
<b>Available bundle sizes 4 K EP-DF self-levelling coating WE conductive 1.5 – 2.0 mm</b>					
<b>Art.-no:</b>	<b>Bundle size:</b>	<b>Bundle composition:</b>			
	<b>Comp. A+B+C+D</b>	<b>Comp.A (resin)</b>	<b>Comp.B (hardener)</b>	<b>Comp.C (filler for 1.5-2.0 mm)</b>	<b>Comp.D (pigment powder)</b>
052001+RAL Nr.-X27	<b>12.806 kg</b>	3.576 kg	1.43 kg	7.50 kg	0.30 kg
052001+RAL Nr.-X28	<b>30.735 kg</b>	8.585 kg	3.43 kg	18.00 kg	0.72 kg

Please note that no liability of the manufacturer can be deduced notably from the content of these technical data sheets as application and processing are outside our sphere of influence. All prices quoted plus legal VAT. Delivery and benefits exclusively based on our general terms and conditions.

Technical data sheet date 01.10.2010

<b>2 K PLASTISTONE® EP – conductive lacquer WE</b>	
<b>Application areas:</b>	<ul style="list-style-type: none"> <li>→ As highly conductive intermediate layer under the EP DF self-levelling coating conductive, for producing electrically conductive floors. In production halls, storage rooms, computer cabinets, department stores, hospitals, on concrete, screed and magnesite as well as anhydrite substrates.</li> <li>→ Furthermore in bottling companies, everywhere where combustible gas/air mixtures or flammable liquids are being used or where electrostatic charging of floor surfaces is to be omitted.</li> <li>→ Please mind the general advice in catalogue group 1.</li> </ul>
<b>Properties:</b>	<ul style="list-style-type: none"> <li>→ EP-conductive lacquer WE is a water-soluble dispersion based on 2K-epoxy resin.</li> <li>→ Discharge resistance amounts to <math>10^4</math> to <math>10^6</math> Ohm in cured condition (tested acc. to DIN EN 1081 and DIN EN 61340 5-1 / 4-5)</li> <li>→ EP- conductive lacquer WE does not contain solvents (despite water)</li> </ul>
<b>Safety data sheets:</b>	<ul style="list-style-type: none"> <li>→ On our homepage, domain Shop Articles</li> </ul>
<b>Resistance:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 chemical resistance of coating surfaces</li> </ul>
<b>Subsurface preparation:</b>	<ul style="list-style-type: none"> <li>→ See catalogue group 1 General requirements to subsurface</li> </ul>
<b>Primer/levelling compound:</b>	<ul style="list-style-type: none"> <li>→ Treat the surface with 2K EP-DF binding agent as primer according to technical data sheet.</li> <li>→ After the primer has cured (48h max), treat the surface with 3K EP-DF fine spatula in case of insufficient substrate evenness.</li> <li>→ Now the surface's evenness should be verified once more and intermediate grinding be effected if necessary, as warpings have negative effects on conductivity. <i>Attention!! Do not sand intermediate layers!!!!</i></li> </ul>
<b>Copper strips:</b>	<ul style="list-style-type: none"> <li>→ Now the self-adhesive copper strips are pasted onto the floor with a distance or grid of ~ 5 * 5 m.</li> <li>→ On small surfaces up to ~ 100 m<sup>2</sup>, 2-4 strings in fan shape are sufficient - on the floor with a length of ~ 1 m and drawn up on the wall about 30 cm.</li> <li>→ Make sure you have cleaned these areas with acetone or something similar beforehand. Press on the copper strips with a cloth. The free ends of the copper strips need to be drawn up vertically about 30 cm on the walls and connected by an electrician to the ring line or directly fixed on a ground terminal.</li> <li>→ (also see application instructions in group 3 on the last page)</li> </ul>
<b>Processing EP-conductive lacquer</b>	<ul style="list-style-type: none"> <li>→ Completely empty hardener component (B) into resin component (A) and mix with a suitable agitator for ~ 2 minutes and then let it mature for 10 min. Then change the mix into another pail and mix for another minute. Crosswise roll the mix out of the pail onto the surface by using a paint roller.</li> <li>→ Do not surpass the processing time of the mixed material of 1.5 hours max at 20°C!! (Shorter at higher temperatures!)</li> <li>→ <i>Attention !!</i> Do not process any longer, even if the material does not show a visible alteration. After exceeding this time, reactivity of the EP-conductive lacquer is no longer given!</li> <li>→ <i>Attention!! Do not sand intermediate layers!!!!</i></li> <li>→ Accessible and coatable with 4K EP-DF self-levelling coating conductive after ~ 16 hours at 20°C (the given times extend at lower substrate temperatures and high air moisture).</li> <li>→ After the conductive lacquer has cured, slightly grind with a grinding machine for removing dirt particles or other foreign body inclusions. Afterwards vacuum clean the surface! (Grinding of the cured EP-conductive lacquer may be replaced by repelling with a steel blade.)</li> </ul>

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<b>2 K PLASTISTONE® EP – conductive lacquer WE</b>		
We especially point out that the following technical values can only be achieved with components like binding agent / fillers / pigments. Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.		
<b>Product data</b> <b>2K EP–conductive lacquer WE:</b>	<b>Component A:</b>	<b>Component B:</b>
Viscosity at 23 °C:	~ 300-500 mPas	
Solids content:	~ 42 %	
Mix ratio PBW:	500 PBW	100 PBW
Mixing time:	2 min., then let mature 10 min., re-pot and agitate for 1 min.	
<b>Material consumption:</b>	0.12 – 0.15 kg / m <sup>2</sup> with paint roller	
Density (mix):	1.15 kg / l	
Pot life at 20°C:	max. 1.5 h. ( do not process any longer, change of characteristics possible)	
Curing time at 20°C:	Curing times are influenced by air moisture and temperature. - accessible after ~ 16 h, coatable after ~ 24 h, chargeable after ~48h - fully mechanically loadable after 3-5 days, chemically loadable after approx.7 days Curing times double with high air moisture (> 70%). Ensure sufficient ventilation immediately after processing. Ensure sufficient ventilation during processing. After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible. (sanded subsurface are an exception.	
Shelf life:	~ 12 months at 15°C to 25°C storage temperature	
Colour:	Acc. to colour chart	
Cleaner for tools:	Water (if no initial curing has taken place)	
<b>GISCODE:</b>	RE 1 (epoxy resin products, solvent-free)	
<b>CE Norm</b> as per DIN EN13813:	CE-label: EN 13813 SR-AR1-B3,3	
<b>Mechanical properties:</b>	<b>Test report no. P 3835-15 of Polymer Institute Flörsheim</b>	
As intermediate layer of the EP-self-levelling coating conductive		
<b>Electrostatic properties:</b>	Measuring voltage 100 V	
Discharge resistance DIN EN 1081	between 10 <sup>4</sup> Ohm and 10 <sup>6</sup> Ohm	
Discharge resistance DIN EN 61340-5-1	between 10 <sup>4</sup> Ohm and 10 <sup>6</sup> Ohm	
On compliance with material application between 0.12 to 0.15 kg/m <sup>2</sup> , the discharge resistance lies between 10 <sup>4</sup> Ohm and 10 <sup>6</sup> Ohm		
<b>Available bundle sizes 2 K EP-conductive lacquer WE</b>		
<b>2 - component – bundle (packed in weights appropriate to each other):</b>		
<b>Art.-no:</b>	<b>Bundle size:</b>	<b>Bundle composition:</b>
03 25 03 0000-Y83	<b>9.0 kg</b>	Comp.A: 7.50 kg; Comp.B: 1.50 kg

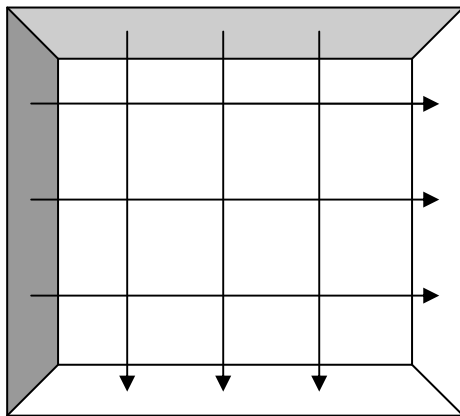
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## Assessing the requirement of copper strips

### First way of laying out the copper strip:

Use case: large, rather square surfaces

Base area 400 m<sup>2</sup> with 20 metres side length at a time, display copper strip every 5 metres and let it overlap upwards on the edge 30 cm minimum:  
6 blanks x 20,6 r.m. = 123,6 r.m. on the floor  
Total demand minimum: 123,6 r.m., corresponds to 7 rolls of copper strip with 20 r.m./roll  
10 - 20 % surcharge are recommendable for balancing possible overlaps or the like  
F Rule of thumb for lattice layout: per m<sup>2</sup> 0,5 r.m. of copper strip and you are on the „safe side“.



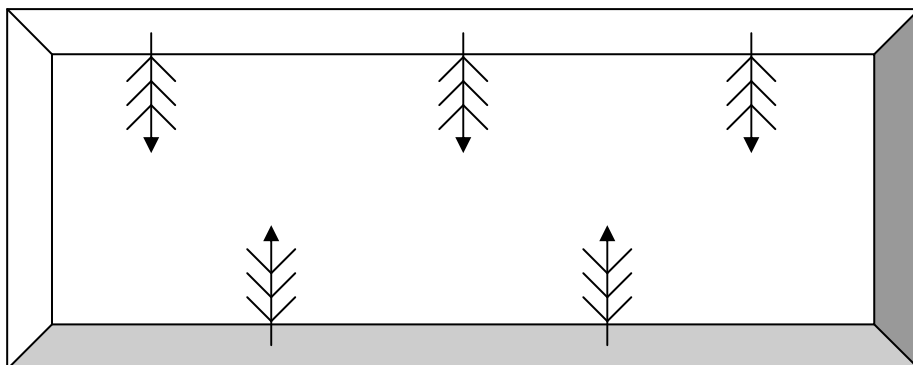
Frequently used ways for connecting the conduction:

- radiators
- frequently CNC machines
- sockets

We recommend consulting an electrician for displaying the copper strips as he needs to connect them to the earth.

### Second way of laying out the copper strip:

Use case: rather smaller surfaces or elongated surfaces



Base area 20 r.m. length x 5 r.m. width = 100 m<sup>2</sup> (Conductive points should not diverge more than 5 m from each other)  
The copper strip can be displayed fan-shaped, as shown above, in different but evenly distributed places. One „conductive arrow“ is ~ 1 m (can be elongated) + 30 cm overlap and 6 fans at ~30 cm, results in 3.1 r.m. copper strip per conductive arrow, multiplied by 5 = 15.5 r.m. plus ~ 30 % safety margin (we recommend a higher margin) = 20.15 r.m. = ~ 1 roll