PLASTI CHEMIE
Produktionsgesellschaft mbH

Technical data sheet date 01.10.2010

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## Standard Binding agents / Sealing and coating systems



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PLASTI CHEMIE
Produktionsgesellschaft mbH

Technical data sheet date 01.10.2010

# 2 K PLASTISTONE® EP – Binding agent, standard

| | | |
|---|---|---|
| **Application areas:** | → | The EP-binding agent can be used for producing coloured sealings or self-levelling top coats. This system is also suitable as primer or binding agent for mortar or fine spatula. |
| | → | Application areas are substrate like concrete, screed in the industrial sector with a maximum residual moisture of 3% or in combination with an EP-barrier coat as primer with a maximum residual moisture of 5%. |
| | → | According to the layer thickness and filling with quartz sand or quartz flour suitable for light, medium or heavy loads. |
| | → | As colourless and brilliant sealing, we recommend EP-sealing water emulsified for thin layers (~ 0.10-0.12 kg/m²) or EP-colour quartz sand binding agent as thick layer sealing (from 0.12-0.15kg/m²). |
| | → | If a higher UV-resistance or scratch resistance is required, especially on visually appealing surfaces, we recommend the silk-mat 1 K or 2 K PU-sealing with ~ 0.10-0.12 kg / m². |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | **Solvent-free, modified 2 – component epoxy resin / hardener system** |
| | → | **The standard hardening version is recommended for temperatures > 15°C.** |
| | → | By adding 6 % standard pigments or corresponding fillers, the binding agent can be dyed in 26 different colour shades. |
| | → | Due component B's dark proper colour, this system is not suitable as colourless top coat. On all EP-coatings, EP-sealing water emulsified can be used for this purpose as it excels in minor proper colour and a long processing time. |
| | → | According to filling, accessible after ~48 h at 20 °C |
| **GISCODE:** | → | RE 1 (epoxy resin products, solvent-free) |
| **CE Norm:** | → | As per DIN EN13813**:** CE-label: EN 13813 SR-AR1-B4,0-IR8 |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 120 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Mix ratio PBV: | 89.3 PBV | 50 PBV |
| Mixing time: | 2-3 min. As per bundle size, re-pot and mix for another minute. | |
| Density: | 1.12 kg / l | 1.0 kg / l |
| Pot life at 20°C: | ~ 20 minutes / 300 g preparation. Attention! Larger preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Can be overlain after ~ 16 h, slightly chargeable after ~ 24h, accessible after ~ 48 h, fully chemically and mechanically chargeable after 7 days<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature.<br>After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is nolonger possible.<br>(sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | Comp.A: nearly colourless, Comp.B: amber like | |
| Cleaning of tools: | EP-thinner (if no initial curing has taken place) | |

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# 2 K PLASTISTONE® EP – Binding agent, standard

The following technical values have been achieved with binding agent comp.A+B. On addition of fillers, the mechanical values are being altered. The values on the following pages can be used for sealing or EP-self-levelling coatings 1-1.5mm/1.5-2mm/2.5-3mm.
Plasti-Chemie International GmbH is not liable for the application of external products as technical properties may strongly deviate then.

| **Mechanical properties:** | **Test report no. P 3835-42 of Polymer Institute Flörsheim** |
|---|---|
| Shore D hardness DIN 53505: | ~ 77 Shore D |
| Adhesive tensile strength DIN EN 1542: | ~ 4.0 N/mm² 100% crack in concrete |
| Bending tensile strength DIN EN 196-1: | ~ 93.7 N/mm² |
| Bending tensile strength DIN EN ISO 178: | ~ 43.0 N/mm² |
| Compressive strength DIN EN 196-1: | ~ 82.2 N/mm² |
| Compressive strength DIN EN ISO 604: | ~ 40.3 N/mm² |
| Abrasion resistance DIN EN ISO 5470-1 | (Taber) 1000 U / ~ 26 mg |
| Impact resistance DIN EN ISO 6272 | ≤ 8 Nm |

**Suggested formulations:** For sealing ,1 mm, 2 mm or 3 mm self-levelling coating

| Components: | Sealing coloured | Layer thickness from 1mm to 1.5mm | Layer thickness from 1.5mm to 2 mm | Layer thickness from 2.5 to 3 mm |
|---|---|---|---|---|
| Comp.A (resin) | 8.00 kg | 8.00 kg | 8.00 kg | 8.00 kg |
| Comp.B (hardener) | 4.00 kg | 4.00 kg | 4.00 kg | 4.00 kg |
| Colour pigment: | 0.72 kg-1.44 kg | 0.72 kg | 0.72 kg | 0.72 kg |
| Filler sealing: | 6 kg | ----- | ----- | ----- |
| Filler 1.0-1.5mm | ----- | 12.00 kg | ----- | ----- |
| Filler 1.5-2.0mm | ----- | ----- | 18.00 kg | ----- |
| Filler 2.5-3.0mm | ----- | ----- | ----- | 25.0 kg |
| Total material consumption per m² | 2 coatings each 0.30 – 0.50 kg/m² | ~ 2.0-2.5 kg / m² at 1.25 to 1.56mm | ~ 2.50-3.20 kg/m² at 1.50 to 2.0 mm | ~ 4.50-5.40 kg / m² at 2.50 to 3.0 mm |
| Material consumption with tools: | Rubber squeegee/ paint roller | SptSpatual dent no.20 Spatual dent no.23 | Spatual dent no.23 Spatual dent no.25 | Spatual dent no.25 Spatual dent no.78 |

## Available bundle sizes 2 K EP-binding agent, standard

| **Art.-no:** | **Bundle content:** | **Bundle composition:** |
|---|---|---|
| 03 11 01 0000-Y21 | **2.5 kg** | Comp.A: 1.66 kg; Comp.B: 0.84 kg **in 2 K bundle** |
| 03 11 01 0000-Y22 | **5.0 kg** | Comp.A: 3.33 kg; Comp.B: 1.67 kg **in 2 K bundle** |
| 03 11 01 0000-Y23 | **12.0 kg** | Comp.A: 8.00 kg; Comp.B: 4.00 kg **in 2 K bundle** |
| 03 11 01 0000-Y24 | **24.0 kg** | Comp.A: 16.00 kg; Comp.B: 8.00 kg |
| 03 11 01 0000-Y25 | **84.0 kg** | Comp.A: 2 x 28 kg in 30 litre hobbock<br>Comp.B: 1 x 28 kg in 30 litre hobbock |
| 03 11 01 0000-Y26 | **165.0 kg** | Comp.A: 2 x 55 kg in 60 litre small barrel<br>Komp.B: 1 x 55 kg in 60 litre small barrel |
| 03 11 01 0000-Y27 | **630.0 kg** | Comp.A: 2 x 210 kg in 210 litre barrel<br>Comp.B: 1 x 210 kg in 210 litre barrel |
| 03 11 01 0000-Y28 | **3000.0 kg** | Comp.A: 2 x 1000 kg in 1000 litre single-use IBC Container<br>Comp.B: 1 x 1000 kg in 1000 litre single-use IBC Container |

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# 2 K PLASTISTONE® EP – Binding agent, rapid

| | | |
|---|---|---|
| **Application areas:** | → | The EP-binding agent **(fast curing)** can be used for producing coloured sealings or self-levelling top coats. This system is also suitable as primer or binding agent for mortar or fine spatula. |
| | → | Application areas are substrate like concrete, screed in the industrial sector with a maximum residual moisture of 3% or in combination with an EP-barrier coat as primer with a maximum residual moisture of 5%. |
| | → | According to the layer thickness and filling with quartz sand or quartz flour suitable for light, medium or heavy loads. |
| | → | As colourless and brilliant sealing, we recommend EP-sealing water emulsified for thin layers (~ 0.10-0.12 kg/m²) or EP-colour quartz sand binding agent as thick layer sealing (~ 0.12-0.15 kg/m²). |
| | → | If a higher UV-resistance or scratch resistance is required, especially on visually appealing surfaces, we recommend the silk-mat 1 K or 2 K PU-sealing with ~ 0.10-0.12 kg / m². |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | **Solvent-free, modified 2 – component epoxy resin / hardener system** |
| | → | **The fast curing version is recommended for temperatures > 5°C < 25°C.** |
| | → | By adding 6 % standard pigments or corresponding fillers, the binding agent can be dyed in 26 different colour shades. |
| | → | According to filling, walkable after ~ 4 h - 6 h and accessible after ~ 12 h -16 h at 20 °C |
| | → | Due component B's dark proper colour and short processing time out of the pot, we disadvise a proceesing with paint roller as colourless sealing. However a processing as coloured sealing with pigments and fillers by discharging the mixtureonto the surface and subsequent dispersion is possible! |
| **GISCODE:** | → | RE 1 (epoxy resin products, solvent-free) |
| **CE Norm:** | → | As per DIN EN13813**:** CE-label: EN 13813 SR-AR1-B3,8-IR16 |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 170 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Mix ratio PBV: | 89.3 PBV | 50 PBV |
| Mixing time: | 2-3 min. As per bundle size, re-pot and mix for another minute. | |
| Density: | 1.12 kg / l | 1.0 kg / l |
| Pot life at 20°C: | ~ 10 minutes / 300 g preparation. Attention! Larger preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Can be overlain after ~ 4 h - 6 h, slightly chargeable after ~12, accessible after ~ 16 h, fully chemically and mechanically chargeable after 4 days. Attention! Curing times are strongly influenced by subsurface and surrounding temperature. After a curing time (at 20°C) of 48 hours, overlaying without grinding (alkaline basic cleaning) is nolonger possible. (sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | Nearly colourless | |
| Cleaning of tools: | EP-thinner (if no initial curing has taken place) | |

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# 2 K PLASTISTONE® EP – Binding agent, rapid

The following technical values have been achieved with binding agent comp.A+B. On addition of fillers, the mechanical values are being altered. The values on the following pages can be used for sealing or EP-self-levelling coatings 1-1.5mm/1.5-2mm/2.5-3mm.
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| **Mechanical properties:** | **Test report no. P 3835-44 of Polymer Institute Flörsheim** |
|---|---|
| Shore D hardness DIN 53505: | ~ 82 Shore D |
| Adhesive tensile strength DIN EN 1542: | ca. 3,8 N/mm² 100% Bruch im Beton |
| Bending tensile strength DIN EN 196-1: | ~ 84.0 N/mm² |
| Bending tensile strength DIN EN ISO 178: | ~ 86.7 N/mm² |
| Compressive strength DIN EN 196-1: | ~ 79.7 N/mm² |
| Compressive strength DIN EN ISO 604: | ~ 79.5 N/mm² |
| Abrasion resistance DIN EN ISO 5470-1 | (Taber) 1000 U / ~34 mg |
| Impact resistance DIN EN ISO 6272 | ≤ 16 Nm |

**Suggested formulations:** For sealing ,1 mm, 2 mm or 3 mm self-levelling coating

| Components: | Sealing coloured | Layer thickness from 1mm to 1.5mm | Layer thickness from 1.5mm to 2 mm | Layer thickness from 2.5 to 3 mm |
|---|---|---|---|---|
| Comp.A (resin) | 8.00 kg | 8.00 kg | 8.00 kg | 8.00 kg |
| Comp.B (hardener) | 4.00 kg | 4.00 kg | 4.00 kg | 4.00 kg |
| Farbpigment: | 0.72 kg-1.44 kg | 0.72 kg | 0.72 kg | 0.72 kg |
| Filler sealing: | 6 kg | ----- | ----- | ----- |
| Filler 1.0-1.5mm | ----- | 12.00 kg | ----- | ----- |
| Filler 1.5-2.0mm | ----- | ----- | 18.00 kg | ----- |
| Filler 2.5-3.0mm | ----- | ----- | ----- | 25.0 kg |
| Total material consumption per m² | 2 coatings each 0.30 – 0.50 kg/m² | ~ 2.0-2.5 kg / m² at 1.25 to 1.56mm | ~ 2.50-3.20 kg/m² at 1.50 to 2.0 mm | ~ 4.50-5.40 kg / m² at 2.50 to 3.0 mm |
| Material consumption with tools: | Rubber squeegee/ paint roller | Spatual dent no.20 Spatual dent no.23 | Spatual dent no.23 Spatual dent no.25 | Spatual dent no.25 Spatual dent no.78 |

## Available bundle sizes 2 K EP-Binding agent, rapid

| Art.-no: | Bundle content: | Bundle composition: | |
|---|---|---|---|
| 03 11 02 0000-Y21 | **2.5 kg** | Comp.A: 1.66 kg; Comp.B: 0.84 kg | **in 2 K bundle** |
| 03 11 02 0000-Y22 | **5.0 kg** | Comp.A: 3.33 kg; Comp.B: 1.67 kg | **in 2 K bundle** |
| 03 11 02 0000-Y23 | **12.0 kg** | Comp.A: 8.00 kg; Comp.B: 4.00 kg | **in 2 K bundle** |
| 03 11 02 0000-Y24 | **24.0 kg** | Comp.A: 16.00 kg; Comp.B: 8.00 kg | |
| 03 11 02 0000-Y25 | **84.0 kg** | Comp.A: 2 x 28 kg in 30 litre hobbock<br>Comp.B: 1 x 28 kg in 30 litre hobbock | |
| 03 11 02 0000-Y26 | **165.0 kg** | Comp.A: 2 x 55 kg in 60 litre small barrel<br>Comp.B: 1 x 55 kg in 60 litre small barrel | |
| 03 11 02 0000-Y27 | **630.0 kg** | Comp.A: 2 x 210 kg in 210 litre barrel<br>Comp.B: 1 x 210 kg in 210 litre barrel | |
| 03 11 02 0000-Y28 | **3000.0 kg** | Comp.A: 2 x 1000 kg in 1000 litre single-use IBC Container<br>Comp.B: 1 x 1000 kg in 1000 litre single-use IBC Container | |

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# 4 K PLASTISTONE® EP – Sealing coloured, standard

| | | |
|---|---|---|
| **Application areas:** | → | As coloured top sealing on concrete and screed floors and other mineral subsurface. |
| | → | Not appropriate for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing or 2K EP-Easy Elastic sealing. |
| | → | Due to the solvent-free formula, this product can be well applied in basement garages, warehouses and other closed rooms. |
| | → | Everywhere where there are already even subsurfaces and the required load capacity or stability of the subsurface already exists. |
| | → | With a high mechanic concentrated load, e.g. by forklift trucks, an EP-self-levelling coating starting at 2 mm is to be preferred. Or the sealing is applied in several layers (3 to 4 minimum) with intermediate sanding on the entire surface. |
| | → | As application in relation with skid-proof dispersal material, a higher slip-resistance can be achieved. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | **The standard curing version is recommended for temperatures > 15°C.** |
| | → | **Solvent-free** and thus little smell nuisance. |
| | → | Available in 26 different standard colour shades. |
| | → | For light colours as RAL 1001/1002/1014/1021/9010, the double amount of colour powder should be used. (Increase from one bag to two) |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | When using chips up to 0.20kg/m², you can work with one layer of colourless sealing. From 0.20kg/m², you should reckon two work operations corresponding to the sealing product. |
| | → | Suitable sealings are 2K EP-sealing WE,<br>2K EP-colorit quartz sand binding agent, 2K EP-elastic sealing,<br>2K PU-sealing WE mat or 1K PU-sealing satin-gloss. |
| | → | For vehicle garages, you should renounce using 1K/2K PU-sealings as there is an increased risk of a plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | On the first coating of dense concrete or screed floors, you can add up to 5 % maximum EP-thinner; the second coat should be effected undiluted in order to achieve a good covering power. |
| | → | Seamless rolling is necessary for achieving an even surface pattern. Irregular application results in streaking. |
| | → | Processing with a rubber squeegee ensures a complete impregnation of the subsurface which often replaces an additional levelling compound of the substrate. Furthermore processing time is being prolongated. |
| | → | Best results with a coloured coating are being achieved when applying the material with a 25 cm paint roller and on larger surfaces with a rubber squeegee. At the latest to be used after 15 minutes without additional material with a 50 cm paint roller and seamlessly re-work in one direction. |
| | → | Attention! Manual mixing of components A and B is impossible as this would not result in sufficient hardening. |

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# 4 K PLASTISTONE® EP - Sealing coloured, standard

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 120 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Mix ratio PBV: | 89.3 PBV | 50 PBV |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 50 % fillers on comp. A+B | |
| Density at 20°C in the mix: | 1.3 kg / l | |
| Mixing time: | 3 minutes minimum according to preparation quantity | |
| **Material consumption:** | As coloured sealing, the first coat as primer ~ 0.35 – 0.45 kg / m² and two subsequent coats as cover layer with each ~ 0.30 – 0.40 kg / m² | |
| Pot life at 20°C: | ~ 30 min. / 300 g preparation Attention! Larger preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Can be overlain after ~ 16 hours, slightly chargeable after ~ 24 hours, trafficable after ~ 48 h, fully chemically and mechanically chargeable after 7 days Attention! Curing times are strongly influenced by subsurface and surrounding temperature. 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: | According to colour chart | |
| Cleaning of tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B3,5-IR16 | |
| **Mechanical properties:** | **Test report no. P 3835-11a of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 78 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 3.5 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 70 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 34.1 N/mm² | |
| Compressive strength DIN EN ISO 604: | ~ 40.9 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 16 Nm | |

**On customer request 7.80 kg and 18.72 kg bundles are available pigmented!**

## Available bundle sizes 4 K EP-sealing, coloured, standard

| **Art.-no:** | **Bundle content:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for sealing)** | **Comp.D (pigment powder)** |
| 031201+RAL Nr.-Y50 | **7.80 kg** | 3.33 kg | 1.67 kg | 2.50 kg | 0.30 kg |
| 031201+RAL Nr.-Y51 | **18.72 kg** | 8.00 kg | 4.00 kg | 6.00 kg | 0.72 kg |
| 031201+RAL Nr.-Y52 | **979.44 kg** | 2 x 210 kg | 1 x 210 kg | 52 x 6.00 kg | 52 x 0.72 kg |

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# 4 K PLASTISTONE® EP - Sealing coloured, rapid

| | | |
|---|---|---|
| **Application areas:** | → | As **fast curing** coloured top sealing on concrete and screed floors and other mineral subsurface. |
| | → | Not appropriate for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing rapid or 2K EP-Easy Elastic sealing rapid. |
| | → | Due to the solvent-free formula, this product can be well applied in basement garages, warehouses and other closed rooms. |
| | → | Everywhere where there are already even subsurfaces and the required load capacity or stability of the subsurface already exists. |
| | → | With a high mechanic concentrated load, e.g. by forklift trucks, an EP-self-levelling coating starting at 2 mm is to be preferred. Or the sealing is applied in several layers (3 to 4 minimum) with intermediate sanding on the entire surface. |
| | → | As application in relation with skid-proof dispersal material, a higher slip-resistance can be achieved. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | **The fast curing version is recommended at temperatures < 25°C.** |
| | → | **Solvent-free** and thus low odour nuisance. |
| | → | Available in 26 different standard colour shades. |
| | → | For light colours as RAL 1001/1002/1014/1021/9010, the double amount of colour powder should be used. (Increase from one bag to two) |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | When using chips up to 0.20 kg/m², you can work with one layer of colourless sealing. From 0.20 kg/m², you should reckon two work operations corresponding to the sealing product. |
| | → | Suitable sealings are 2K EP-sealing WE,<br>2K EP- colorit quartz sand binding agent, 2K EP-Elastic sealing,<br>2K PU-sealing WE mat or 1K PU-sealing satin-gloss. |
| | → | For vehicle garages, you should renounce using 1K/2K PU-sealings as there is an increased risk of a plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | On the first coating of dense concrete or screed floors, you can add up to 5 % maximum EP-thinner; the second coat should be effected undiluted in order to achieve a good covering power. |
| | → | Seamless rolling is necessary for achieving an even surface pattern. Irregular application results in streaking. |
| | → | Processing with a rubber squeegee ensures a complete impregnation of the subsurface which often replaces an additional levelling compound of the substrate. **Furthermore processing time is being prolongated**. |
| | → | Best results with a coloured coating are being achieved when applying the material with a rubber squeegee. At the latest to be used after 15 minutes without additional material with a 50 cm paint roller and seamlessly re-work in one direction. **Processing only with the paint roller is not possible!** |
| | → | Attention! Manual mixing of components A and B is impossible as this would not result in sufficient hardening. |

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# 4 K PLASTISTONE® EP - Sealing coloured, rapid

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 200 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Mix ratio PBV: | 89.3 PBV | 50 PBV |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 50 % fillers on comp. A+B | |
| Density at 20°C in the mix: | 1.3 kg / l | |
| Mixing time: | 3 minutes minimum according to preparation quantity | |
| **Material consumption:** | As coloured sealing, the first coat as primer ~ 0.35 – 0.45 kg / m² and two subsequent coats as cover layer with each ~ 0.30 – 0.40 kg / m² | |
| Pot life at 20°C: | ~ 15 min. / 300 g preparation<br>Attention! Larger preparations or higher temperatures shorten pot life (processing time)<br>Immediate discharging of the preparation prolongates the processing time on the surface about 30 minutes. Furthermore an extension of processing time can be achieved with cool storage of the products (~15°C) | |
| Curing time at 20°C: | Can be overlain after ~ 4 h - 6 h, slightly chargeable after ~ 12 h, trafficable after ~ 16 h, fully chemically and mechanically chargeable after 4 days<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature. After a curing time (at 20°C) of 48 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible.<br>(sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | According to colour chart | |
| Cleaning of tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B4,4-IR16 | |
| **Mechanical properties:** | **Test report no. P 3835-45 of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 80 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 4.4 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 57 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 51.6 N/mm² | |
| Compressive strength DIN EN ISO 604: | ~ 74.6 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 16 Nm | |

**On customer request 7.80 kg and 18.72 kg bundles are available pigmented!**

**Available bundle sizes 4 K EP-sealing, coloured, rapid**

| **Art.-no:** | **Bundle content:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for sealing)** | **Comp.D (pigment powder)** |
| 031202+RAL Nr.-Y50 | **7.80 kg** | 3.33 kg | 1.67 kg | 2.50 kg | 0.30 kg |
| 031202+RAL Nr.-Y51 | **18.72 kg** | 8.00 kg | 4.00 kg | 6.00 kg | 0.72 kg |
| 031202+RAL Nr.-Y52 | **979.44 kg** | 2 x 210 kg | 1 x 210 kg | 52 x 6.00 kg | 52 x 0.72 kg |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP–self-levelling coating 1.0 – 1.5 mm, standard

| | | |
|---|---|---|
| **Application areas:** | → | As coloured, self-levelling thin coating in interior zones for production halls, warehouses, basement garages on concrete and screed, everywhere where there arealready even substrates as well as a corresponding load capacity or stability for the charges that are to be expected. |
| | → | Due to its solvent-free formulation, this product can be very well applied in basement garages, warehouses and other closed rooms. |
| | → | On concrete and screed floors that can be coated vapour diffusion tight. |
| | → | For substrate with maximum residual moisture of 3% or in combination with the EP-barrier coat as primer up to maximum residual moisture of 5%. |
| | → | Application with light traffic by forklifts and electric pallet trucks. The total weight of 2.5t max. should not be surpassed. |
| | → | Not suitable for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing or 2K EP-Easy Elastic sealing. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | Self-levelling from a layer thickness of 1.0 mm (acc. to substrate and at 20°C) |
| | → | Solvent-free, modified 2 – component epoxy resin / hardener system |
| | → | **The standard curing version is recommended for temperatures of > 15°C.** |
| | → | Available in 26 different standard colour shades. Colour pigment and fillers are only added on processing. This results in a high flexibility on storage and application. |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | In areas where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m² colour chips onto the fresh self-levelling coating as additional protection. After curing, apply a colourless 1K satin-gloss or 2K mat PU-sealing. |
| | → | From a quantity of 0.20kg/m² colour chips, you should reckon 2 work operations according to the sealing product. |
| | → | As colourless, brilliant sealing, we recommend the 2K EP-sealing WE for thin layer types (with ~ 0.10-0.12 kg/m²) or EP- coloritquartz sand binder as thick layer sealing (with ~ 0.12-0.15kg/m²). |
| | → | In combination with anti-slip grit and the colourless sealing, you can achieve non-skid surfaces. |
| | → | In vehicle garages, you should abstain from using the 1K/2K PU-sealing as there is an increased risk of plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | The colour pigment should be stirred into component A with a fast running agitator as otherwise there is no sufficient dispersion (pinholing). Thus slow running one or double-spiral agitators are unsuitable. |
| | → | Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller. |
| | → | Generally it is recommended to immediately disperse the mixed material on the surface as it stays longer processible this way. Additionally it is avoided that the filler deposits in the pail which might cause uneven surfaces like levelling disturbances or colour disparities. |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP– self-levelling coating 1.0 – 1.5 mm, standard

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 120 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 100 % fillers on comp. A+B | |
| Mixing time: | 3 min. | |
| **Material consumption:** | Practical consumption with trowel toothing:<br>no. 20 max. 2.0 kg/m² = 1.25 mm, no. 23 max. 2.5 kg/m² = 1.56 mm | |
| Density (mix): | 1.60 kg / l | |
| Pot life at 20°C: | ~ 30 min. / 300 g preparation<br>Attention! Larger preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Can be overlain after ~ 16 h, slightly chargeable after ~ 24 hours, trafficable after ~ 48 h, fully chemically and mechanically chargeable after 7 days<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature.<br>After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible.<br>(sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | Acc. to colour chart | |
| Cleaning for tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B3,3-IR20 | |
| **Mechanical properties:** | **Test report no. P 3835-12a of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 83 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 3.3 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 81 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 45.1 N/mm² | |
| Compressive strength DIN EN ISO 604: | Compression stress, 10% strain ~ 45.5 N/mm² sample **not** destroyed<br>Compression stress, 20% strain ~ 56.0 N/mm² sample **not** destroyed | |
| Impact resistance DIN EN ISO 6272 | ≤ 20 Nm | |

**On customer request 10.30 kg and 24.72 kg bundles are available pigmented!**

## Available bundle sizes 4 K EP-self-levelling coating 1.0 – 1.5 mm, standard

| **Art.-no:** | **Bundle size:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for 1.0-1.5mm)** | **Comp.D (pigment powder)** |
| 031301+RAL Nr.-Y55 | **10.30 kg** | 3.33 kg | 1.67 kg | 5.0 kg | 0.30 kg |
| 031301+RAL Nr.-Y56 | **24.72 kg** | 8.00 kg | 4.00 kg | 12.00 kg | 0.72 kg |
| 031301+RAL Nr.-Y57 | **1291.44 kg** | 2x 210 kg | 1x 210 kg | 52x 12.00 kg | 52x 0.72 kg |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP– self-levelling coating 1.0 – 1.5 mm, rapid

| | | |
|---|---|---|
| **Application areas:** | → | As coloured, **fast curing**, self-levelling thin coating in interior zones for production halls, warehouses, basement garages on concrete and screed, everywhere where there are already even substrates as well as a corresponding load capacity or stability for the charges that are to be expected. |
| | → | Due to its solvent-free formulation, this product can be very well applied in basement garages, warehouses and other closed rooms. |
| | → | On concrete and screed floors that can be coated vapour diffusion tight. |
| | → | For substrate with maximum residual moisture of 3% or in combination with the EP-barrier coat as primer up to maximum residual moisture of 5%. |
| | → | Application with light traffic by forklifts and electric pallet trucks. The total weight of 2.5t max. should not be surpassed. |
| | → | Not suitable for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing or 2K EP-Easy Elastic sealing. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | Self-levelling from a layer thickness of 1.0 mm (acc. to substrate and at 20°C) |
| | → | Solvent-free, modified 2 – component epoxy resin / hardener system |
| | → | **The fast curing version is recommended for temperatures < 25°C.** |
| | → | Available in 26 different standard colour shades. Colour pigment and fillers are only added on processing. This results in a high flexibility on storage and application. |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | In areas where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m² colour chips onto the fresh self-levelling coating as additional protection. After curing, apply a colourless 1K satin-gloss or 2K mat PU-sealing. |
| | → | From a quantity of 0.20kg/m² colour chips, you should reckon 2 work operations according to the sealing product. |
| | → | As colourless, brilliant sealing, we recommend the 2K EP-sealing WE for thin layer types (with ~ 0.10-0.12 kg/m²) or EP- coloritquartz sand binder as thick layer sealing (with ~ 0.12-0.15kg/m²). |
| | → | In combination with anti-slip grit and the colourless sealing, you can achieve non-skid surfaces. |
| | → | In vehicle garages, you should abstain from using the 1K/2K PU-sealing as there is an increased risk of plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | The colour pigment should be stirred into component A with a fast running agitator as otherwise there is no sufficient dispersion (pinholing). Thus slow running one or double-spiral agitators are unsuitable. |
| | → | Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller. |
| | → | Generally it is recommended to immediately disperse the mixed material on the surface as it stays longer processible this way. Additionally it is avoided that the filler deposits in the pail which might cause uneven surfaces like levelling disturbances or colour disparities. |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP– self-levelling coating 1.0 – 1.5 mm, rapid

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 200 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 100 % filler on comp. A+B | |
| Mixing time: | 3 min. | |
| **Material consumption:** | Practical consumption with trowel toothing:<br>no. 20 max. 2.0 kg/m² = 1.25 mm no. 23 max. 2.5 kg/m² = 1.56 mm | |
| Density (mix): | 1.60 kg / l | |
| Pot life at 20°C: | ~ 15 min. / 300 g preparation<br>Attention! Larger preparations or higher temperatures shorten pot life (processing time)<br>Immediate discharging of the preparation prolongates the processing time on the surface about 30 minutes. Furthermore an extension of processing time can be achieved with cool storage of the products (~15°C) | |
| Curing time at 20°C: | Can be overlain after ~ 4 h - 6 h, slightly chargeable after ~ 12 hours, trafficable after ~ 16 h, fully chemically and mechanically chargeable after 4 days.<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature.<br>After a curing time (at 20°C) of 48 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible.<br>(sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | Acc. to colour chart | |
| Cleaning for tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B4,3-IR8 | |
| **Mechanical properties:** | **Test report no. P 3835-47 of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 83 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 4.3 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 51 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 61.0 N/mm² | |
| Compressive strength DIN EN ISO 604: | ~ 83.8 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 8 Nm | |

**On customer request 10.30 kg and 24.72 kg bundles are available pigmented!**

## Available bundle sizes 4 K EP-self-levelling coating 1.0 – 1.5 mm, rapid

| **Art.-no:** | **Bundle size:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for 1.0-1.5mm)** | **Comp.D (pigment powder)** |
| 031302+RAL Nr.-Y55 | **10.30 kg** | 3.33 kg | 1.67 kg | 5.0 kg | 0.30 kg |
| 031302+RAL Nr.-Y56 | **24.72 kg** | 8.00 kg | 4.00 kg | 12.00 kg | 0.72 kg |
| 031302+RAL Nr.-Y57 | **1291.44 kg** | 2x 210 kg | 1x 210 kg | 52x 12.00 kg | 52x 0.72 kg |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 1.5 – 2.0 mm, standard

| | | |
|---|---|---|
| **Application areas:** | → | As coloured, self-levelling thin coating in interior zones for production halls, warehouses, basement garages on concrete and screed, everywhere where there arealready even substrates as well as a corresponding load capacity or stability for the charges that are to be expected. |
| | → | Due to its solvent-free formulation, this product can be very well applied in basement garages, warehouses and other closed rooms. |
| | → | On concrete and screed floors that can be coated vapour diffusion tight. |
| | → | For substrate with maximum residual moisture of 3% or in combination with the EP-barrier coat as primer up to maximum residual moisture of 5%. |
| | → | From a layer thickness of 2 mm, this coating is suitable for vehicular traffic like forklift trucks (4 wheel version) with charges up to 3.5t. |
| | → | Not suitable for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing or 2K EP-Easy Elastic sealing. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | Self-levelling from a layer thickness of 1.5 mm (acc. to substrate and at 20°C) |
| | → | Solvent-free, modified 2 – component epoxy resin / hardener system |
| | → | **The standard curing version is recommended for temperatures of > 15°C.** |
| | → | Available in 26 different standard colour shades. Colour pigment and fillers are only added on processing. This results in a high flexibility on storage and application. |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | In areas where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m² colour chips onto the fresh self-levelling coating as additional protection. After curing, apply a colourless 1K satin-gloss or 2K mat PU-sealing. |
| | → | From a quantity of 0.20kg/m² colour chips, you should reckon 2 work operations according to the sealing product. |
| | → | As colourless, brilliant sealing, we recommend the 2K EP-sealing WE for thin layer types (with ~ 0.10-0.12 kg/m²) or EP- coloritquartz sand binder as thick layer sealing (with ~ 0.12-0.15kg/m²). |
| | → | In combination with anti-slip grit and the colourless sealing, you can achieve non-skid surfaces. |
| | → | In vehicle garages, you should abstain from using the 1K/2K PU-sealing as there is an increased risk of plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | The colour pigment should be stirred into component A with a fast running agitator as otherwise there is no sufficient dispersion (pinholing). Thus slow running one or double-spiral agitators are unsuitable. |
| | → | Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller. |
| | → | Generally it is recommended to immediately disperse the mixed material on the surface as it stays longer processible this way. Additionally it is avoided that the filler deposits in the pail which might cause uneven surfaces like levelling disturbances or colour disparities. |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 1.5 – 2.0 mm, Standard

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 120 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 150 % filler on comp. A+B | |
| Mixing time: | 3 min. | |
| **Material consumption:** | Practical consumption with trowel toothing:<br>no. 20 max. 2.5 kg/m² = 1.52 mm<br>no. 23 max. 2.7 kg/m² = 1.64 mm<br>no. 25 max. 3.2 kg/m² = 1.94 mm | |
| Density (mix): | 1.65 kg / l | |
| Pot life at 20°C: | ~ 40 min. / 300 g preparation. Attention! Larger preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Can be overlain after ~ 16 h, slightly chargeable after ~ 24h, trafficable after ~ 48 h,<br>fully chemically and mechanically chargeable after 7 days<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature.<br>After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible.<br>(sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | Acc. to colour chart | |
| Cleaning for tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B3,6-IR20 | |
| **Mechanical properties:** | **Test report no. P 3835-13a of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 83 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 3.6 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 100 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 37.9 N/mm² | |
| Compressive strength DIN EN ISO 604: | ~ 51.4 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 20 Nm | |

**On customer request 12.80 kg and 30.72 kg bundles are available pigmented!**

## Available bundle sizes 4 K EP- self-levelling coating 1.5 – 2.0 mm, standard

| **Art.-no:** | **Bundle size:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for 1.5-2.0 mm)** | **Comp.D (pigment powder)** |
| 031401+RAL Nr.-Y58 | **12.80 kg** | 3.33 kg | 1.67 kg | 7.50 kg | 0.30 kg |
| 031401+RAL Nr.-Y59 | **30.72 kg** | 8.00 kg | 4.00 kg | 18.00 kg | 0.72 kg |
| 031401+RAL Nr.-Y60 | **1603.44 kg** | 2x 210 kg | 1x 210 kg | 52x 18.00 kg | 52x 0.72 kg |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 1.5 – 2.0 mm, rapid

| | | |
|---|---|---|
| **Application areas:** | → | As coloured, **fast curing**, self-levelling thin coating in interior zones for production halls, warehouses, basement garages on concrete and screed, everywhere where there are already even substrates as well as a corresponding load capacity or stability for the charges that are to be expected. |
| | → | Due to its solvent-free formulation, this product can be very well applied in basement garages, warehouses and other closed rooms. |
| | → | On concrete and screed floors that can be coated vapour diffusion tight. |
| | → | For substrate with maximum residual moisture of 3% or in combination with the EP-barrier coat as primer up to maximum residual moisture of 5%. |
| | → | From a layer thickness of 2 mm, this coating is suitable for vehicular traffic like forklift trucks (4 wheel version) with charges up to 3.5t. |
| | → | Not suitable for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing or 2K EP-Easy Elastic sealing. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | Self-levelling from a layer thickness of 1.5 mm (acc. to substrate and at 20°C) |
| | → | Solvent-free, modified 2 – component epoxy resin / hardener system |
| | → | **The fast curing version is recommended for temperatures < 25°C.** |
| | → | Available in 26 different standard colour shades. Colour pigment and fillers are only added on processing. This results in a high flexibility on storage and application. |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | In areas where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m² colour chips onto the fresh self-levelling coating as additional protection. After curing, apply a colourless 1K satin-gloss or 2K mat PU-sealing. |
| | → | From a quantity of 0.20kg/m² colour chips, you should reckon 2 work operations according to the sealing product. |
| | → | As colourless, brilliant sealing, we recommend the 2K EP-sealing WE for thin layer types (with ~ 0.10-0.12 kg/m²) or EP- coloritquartz sand binder as thick layer sealing (with ~ 0.12-0.15kg/m²). |
| | → | In combination with anti-slip grit and the colourless sealing, you can achieve non-skid surfaces. |
| | → | In vehicle garages, you should abstain from using the 1K/2K PU-sealing as there is an increased risk of plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | The colour pigment should be stirred into component A with a fast running agitator as otherwise there is no sufficient dispersion (pinholing). Thus slow running one or double-spiral agitators are unsuitable. |
| | → | Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller. |
| | → | Generally it is recommended to immediately disperse the mixed material on the surface as it stays longer processible this way. Additionally it is avoided that the filler deposits in the pail which might cause uneven surfaces like levelling disturbances or colour disparities. |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 1.5 – 2.0 mm, rapid

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 200 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 150 % filler on comp. A+B | |
| Mixing time: | 3 min. | |
| **Material consumption:** | Practical consumption with trowel toothing:<br>no. 20 max. 2.5 kg/m² = 1.52 mm / no. 23 max. 2.7 kg/m² = 1.64 mm<br>no. 25 max. 3.2 kg/m² = 1.94 mm | |
| Density (mix): | 1.65 kg / l | |
| Pot life at 20°C: | ~ 15 min. / 300 g preparation<br>Attention! Larger preparations or higher temperatures shorten pot life (processing time)<br>Immediate discharging of the preparation prolongates the processing time on the surface about 30 minutes. Furthermore an extension of processing time can be achieved with cool storage of the products (~15°C) | |
| Curing time at 20°C: | Can be overlain after 4 h - 6 h, slightly chargeable after ~ 12h, trafficable after ~ 16 h, fully chemically and mechanically chargeable after 4 days.<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature.<br>After a curing time (at 20°C) of 48 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 | |
| Cleaning for tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B4,2-IR20 | |
| **Mechanical properties:** | **Test report no. P 3835-48 of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 85 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 4.2 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 48 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 40.4 N/mm² | |
| Compressive strength DIN EN ISO 604: | ~ 85.2 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 20 Nm | |

**On customer request 12.80 kg and 30.72 kg bundles are available pigmented!**

## Available bundle sizes 4 K EP- self-levelling coating 1.5 – 2.0 mm, rapid

| **Art.-no:** | **Bundle size:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for 1.5-2.0 mm)** | **Comp.D (pigment powder)** |
| 031402+RAL Nr.-Y58 | **12.80 kg** | 3.33 kg | 1.67 kg | 7.50 kg | 0.30 kg |
| 031402+RAL Nr.-Y59 | **30.72 kg** | 8.00 kg | 4.00 kg | 18.00 kg | 0.72 kg |
| 031402+RAL Nr.-Y60 | **1603.44 kg** | 2x 210 kg | 1x 210 kg | 52x 18.00 kg | 52x 0.72 kg |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 2.5 - 3 mm, standard

| | | |
|---|---|---|
| **Application areas:** | → | As coloured, self-levelling thin coating in interior zones for production halls, warehouses, basement garages on concrete and screed, everywhere where there arealready even substrates as well as a corresponding load capacity or stability for the charges that are to be expected. |
| | → | Due to its solvent-free formulation, this product can be very well applied in basement garages, warehouses and other closed rooms. |
| | → | On concrete and screed floors that can be coated vapour diffusion tight. |
| | → | For substrate with maximum residual moisture of 3% or in combination with the EP-barrier coat as primer up to maximum residual moisture of 5% |
| | → | The coating is suitable for heavy load vehicular traffic, suitable for forklift trucks (4 wheel version) with high concentrated loads up to 6 t. |
| | → | Not suitable for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing or 2K EP-Easy Elastic sealing. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | Self-levelling from a layer thickness of 2.5 mm (acc. to substrate and at 20°C) |
| | → | Solvent-free, modified 2 – component epoxy resin / hardener system |
| | → | **The standard curing version is recommended for temperatures of > 15°C.** |
| | → | Available in 26 different standard colour shades. Colour pigment and fillers are only added on processing. This results in a high flexibility on storage and application. |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | In areas where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m² colour chips onto the fresh self-levelling coating as additional protection. After curing, apply a colourless 1K satin-gloss or 2K mat PU-sealing. |
| | → | From a quantity of 0.20kg/m² colour chips, you should reckon 2 work operations according to the sealing product. |
| | → | As colourless, brilliant sealing, we recommend the 2K EP-sealing WE for thin layer types (with ~ 0.10-0.12 kg/m²) or EP- coloritquartz sand binder as thick layer sealing (with ~ 0.12-0.15kg/m²). |
| | → | In combination with anti-slip grit and the colourless sealing, you can achieve non-skid surfaces. |
| | → | In vehicle garages, you should abstain from using the 1K/2K PU-sealing as there is an increased risk of plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | The colour pigment should be stirred into component A with a fast running agitator as otherwise there is no sufficient dispersion (pinholing). Thus slow running one or double-spiral agitators are unsuitable. |
| | → | Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller. |
| | → | Generally it is recommended to immediately disperse the mixed material on the surface as it stays longer processible this way. Additionally it is avoided that the filler deposits in the pail which might cause uneven surfaces like levelling disturbances or colour disparities. |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 2.5 - 3 mm, standard

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 120 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 208 % filler on comp. A+B | |
| Mixing time: | 3 min. | |
| **Material consumption:** | Self-levelling from 4.5 kg/m² at 20°C<br>Practical consumption with trowel toothing:<br>no. 25 max. 4.50 kg/m² = 2.50 mm<br>no. 78 max. 5.40 kg/m² = 3.00 mm | |
| Density (mix): | 1.80 kg / l | |
| Pot life at 20°C: | ~ 40 min. / 300 g preparation. Attention! Larger preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Can be overlain after ~ 16 h, slightly chargeable after ~ 24h, trafficable after ~ 48 h, fully chemically and mechanically chargeable after 7 days<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature.<br>After a curing time (at 20°C) of 72 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible.<br>(sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | Acc. to colour chart | |
| Cleaning for tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B3,5-IR20-$B_{fl}$-s1 | |
| **Fire behaviour:** | **Material research laboratory (MPA), Stuttgart** | |
| As per DIN 4102 (D - Norm): | Test report no. 16-9012110-EP / fire class: DIN4102-B1 | |
| As per DIN EN 13501-1 (EU - Norm) | Classification report no.16-9012110-80 EP / fire class: $B_{fl}$-s1 | |
| **Mechanical properties:** | **Test report no. P 3835-14a of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 83 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 3.5 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 93 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 42.5 N/mm² | |
| Compressive strength DIN EN ISO 604: | ~ 53.7 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 20 Nm | |

**On customer request 15.70 kg and 37.72 kg bundles are available pigmented!**

## Available bundle sizes 4 K EP- self-levelling coating 2.5 – 3.0 mm, standard

| **Art.-no:** | **Bundle size:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for 2.5-3.0 mm)** | **Comp.D (pigment powder)** |
| 031501+RAL Nr.-Y61 | **15.70 kg** | 3.33 kg | 1.67 kg | 10.40 kg | 0.30 kg |
| 031501+RAL Nr.-Y62 | **37.72 kg** | 8.00 kg | 4.00 kg | 25.00 kg | 0.72 kg |
| 031501+RAL Nr.-Y63 | **1967.44 kg** | 2x 210 kg | 1x 210 kg | 52x 25.00 kg | 52x 0.72 kg |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 2.5 - 3 mm, rapid

| | | |
|---|---|---|
| **Application areas:** | → | As coloured, **fast curing**, self-levelling thin coating in interior zones for production halls, warehouses, basement garages on concrete and screed, everywhere where there are already even substrates as well as a corresponding load capacity or stability for the charges that are to be expected. |
| | → | Due to its solvent-free formulation, this product can be very well applied in basement garages, warehouses and other closed rooms. |
| | → | On concrete and screed floors that can be coated vapour diffusion tight. |
| | → | For substrate with maximum residual moisture of 3% or in combination with the EP-barrier coat as primer up to maximum residual moisture of 5% |
| | → | The coating is suitable for heavy load vehicular traffic, suitable for forklift trucks (4 wheel version) with high concentrated loads up to 6 t. |
| | → | Not suitable for exterior surfaces (yellowing danger) |
| | → | For surfaces with high visual demands in interior zones (like gloss level, surface appearance, yellowing sensitivity) we recommend 4K EP-elastic sealing or 2K EP-Easy Elastic sealing. |
| | → | Please mind the general advice in catalogue group 1! |
| **Properties:** | → | Self-levelling from a layer thickness of 2.5 mm (acc. to substrate and at 20°C) |
| | → | Solvent-free, modified 2 – component epoxy resin / hardener system |
| | → | **The fast curing version is recommended for temperatures < 25°C.** |
| | → | Available in 26 different standard colour shades. Colour pigment and fillers are only added on processing. This results in a high flexibility on storage and application. |
| | → | By partial or full-surface dispersal with colour chips and subsequent colourless coating, terrazzo-like surfaces can be achieved that excel in a high scratch resistance and sure footedness. |
| | → | In areas where increased scratch resistance is required, we recommend to disperse a minimum of 100g/m² colour chips onto the fresh self-levelling coating as additional protection. After curing, apply a colourless 1K satin-gloss or 2K mat PU-sealing. |
| | → | From a quantity of 0.20kg/m² colour chips, you should reckon 2 work operations according to the sealing product. |
| | → | As colourless, brilliant sealing, we recommend the 2K EP-sealing WE for thin layer types (with ~ 0.10-0.12 kg/m²) or EP- coloritquartz sand binder as thick layer sealing (with ~ 0.12-0.15kg/m²). |
| | → | In combination with anti-slip grit and the colourless sealing, you can achieve non-skid surfaces. |
| | → | In vehicle garages, you should abstain from using the 1K/2K PU-sealing as there is an increased risk of plasticiser discolouration. |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Processing:** | → | 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 minute. Change the material into a larger pail and add the filler with the agitator slowly running and mix for about 1 minute. |
| | → | The colour pigment should be stirred into component A with a fast running agitator as otherwise there is no sufficient dispersion (pinholing). Thus slow running one or double-spiral agitators are unsuitable. |
| | → | Discharge the mix onto the surface and disperse with a tooth trowel and roll off with a spiked roller. |
| | → | Generally it is recommended to immediately disperse the mixed material on the surface as it stays longer processible this way. Additionally it is avoided that the filler deposits in the pail which might cause uneven surfaces like levelling disturbances or colour disparities. |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – self-levelling coating 2.5 - 3 mm, rapid

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.

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | + 1150 mPas | ~ 200 mPas |
| Solids content: | 100 % | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 208 % filler on comp. A+B | |
| Mixing time: | 3 min. | |
| **Material consumption:** | Self-levelling from 4.5 kg/m² at 20°C<br>Practical consumption with trowel toothing: no. 25 max. 4.50 kg/m² = 2.50 mm / no. 78 max. 5.40 kg/m² = 3.00 mm | |
| Density (mix): | 1.80 kg / l | |
| Pot life at 20°C: | ~ 15 min. / 300 g preparation<br>Attention! Larger preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Can be overlain after ~ 4 h - 6 h, slightly chargeable after ~ 12h, trafficable after ~ 16 h, fully chemically and mechanically chargeable after 4 days.<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature.<br>After a curing time (at 20°C) of 48 hours, overlaying without grinding (alkaline basic cleaning) is no longer possible.<br>(sanded subsurface are an exception) | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | Acc. to colour chart | |
| Cleaning for tools: | EP-thinner (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B4,1-IR20-$B_{fl}$-s1 | |
| **Fire behaviour:** | **Material research laboratory (MPA), Stuttgart** | |
| As per DIN 4102 (D - Norm): | Test report no. 16-9012110-EP / fire class: DIN4102-B1 | |
| As per DIN EN 13501-1 (EU - Norm) | Classification report no.16-9012110-80 EP / fire class: $B_{fl}$-s1 | |
| **Mechanical properties:** | **Test report no. P 3835-49 of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 87 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 4.1 N/mm² 100% crack in concrete | |
| Abrasion resistance DIN EN ISO 5470-1: | (Taber) ~ 48 mg/1000 U | |
| Bending tensile strength DIN EN ISO 178: | ~ 45.8 N/mm² | |
| Compressive strength DIN EN ISO 604: | ~ 90.3 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 20 Nm | |

**On customer request 15.70 kg and 37.72 kg bundles are available pigmented!**

## Available bundle sizes 4 K EP- self-levelling coating 2.5 – 3.0 mm, rapid

| **Art.-no:** | **Bundle size:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for 2.5-3.0 mm)** | **Comp.D (pigment powder)** |
| 031502+RAL Nr.-Y61 | **15.70 kg** | 3.33 kg | 1.67 kg | 10.40 kg | 0.30 kg |
| 031502+RAL Nr.-Y62 | **37.72 kg** | 8.00 kg | 4.00 kg | 25.00 kg | 0.72 kg |
| 031502+RAL Nr.-Y63 | **1967.44 kg** | 2x 210 kg | 1x 210 kg | 52x 25.00 kg | 52x 0.72 kg |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – Self-levelling coating conductive 1.5 – 2.0 mm

| | | |
|---|---|---|
| **Application areas:** | → | As coloured, self-levelling conductive coating for cementitious subsoil, main application in production halls, computer rooms. |
| | → | Furthermore in bottling plants, where flammable air/gas mixtures or flammable liquids are being processed or where an electrostatic charging of the floor surfaces shall be omitted. |
| | → | For subsoil with residual moisture of 3% max or in combination with EP-barrier coat as primer up to maximum residual moisture of 5%. |
| | → | Mind general advice in catalogue group 1! |
| **Properties:** | → | The resistance to earth amounts to $10^4$ up to $10^8$ Ohm in cured state. (tested according to DIN EN 1081 and DIN EN 61340 5-1) |
| | → | This coating is suitable for vehicular traffic like forklift (4 wheel version) with charging up to 3.5 tonnes. |
| | → | Available in 26 different standard colours |
| | → | EP-self-levelling conductive coating **must not** be overlain with an additional sealing after curing. (disturbance of conductivity) |
| **GISCODE:** | → | RE 1 (epoxy resin products, solvent-free) |
| **CE Norm:** | → | According to DIN EN13813**:** CE-label: EN 13813 SR-B3,3-IR20 |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 Chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Primer/ Levelling compound:** | → | Treat the surface with 2K EP-primer or 2K EP-barrier coat according to technical data sheet. |
| | → | After curing of the primer (max.48 hours) on insufficient subsoil evenness, level the surface with 3K EP- fine spattling compound or 2K EP-barrier coat. |
| | → | Once more control the surfaces evenness and effect an intermediate grinding if required, as unevenness has negative effects on conductivity. *Attention!! Do not broadcast intermediate layers!!!!* |
| | → | |
| **Copper strips:** | → | Now paste the self-adhesive copper strips in a distance or pattern of maximum ~ 5 * 5 m onto the floor. |
| | → | On small surfaces up to ~ 100 m², 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. |
| | → | (Also see processing instructions group 3 on the last page) |
| **Processing the EP-conductive lacquer** | → | See technical data sheet group 3 |
| **Processing conductive EP-coating** | → | Stir resin component (A) with a fast-running agitator (single-shaft) for 1 minute, then add the colour pigment and stir another minute. Afterwards add hardener component (B) and mix with a suitable agitator for about 1 minute. Put the material into a larger pail and slowly add the filler with the agitator running on slowly, mix for ~1 minute. Discharge the mixture onto the surface, disperse with a dented spatula no. 23 (1.7 mm) and immediately de-aerate with a spiked roller in one direction. Good venting with the spiked roller leads to an additional dispersal of fibres. |
| | → | It is absolutely necessary to comply with the material consumption of 2.5 to 2.8 kg/m² 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/m² - especially with bright colours. |

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Technical data sheet date 01.10.2010

# 4 K PLASTISTONE® EP – Self-levelling conductive coating 1.5 – 2.0 mm

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

| **Product data:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 1150 mPas | ~ 120 mPas |
| Solids content: | ~ 100 % fillers and pigments included | |
| Mix ratio PBW: | 100 PBW | 50 PBW |
| Filler addition on comp.A and comp.B: | 6 % colour pigment and 150 % fillers on comp. A+B | |
| Mixing time: | 3 min. | |
| **Material consumption:** | max. Practical consumption: 2.50 kg / m² (1.5mm) up to 2.80 kg / m² (1.7mm) with trowel toothing no. 23 | |
| Density (mixture): | 1.65 kg / l | |
| Pot life at 20°C: | ~ 40 min. / 300 g preparation<br>Attention! Large preparations or higher temperatures shorten pot life (processing time) | |
| Curing time at 20°C: | Accessible after 16 hours, slightly chargeable after 24 h, fit for traffic after 48 h,<br>chemically / mechanically fully chargeable after 7 days.<br>Attention! Curing times are strongly influenced by subsurface and surrounding temperature. | |
| Colour: | According to colour chart | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Cleaner for tools: | EP-thinner (if no initial curing has taken place) | |
| **Mechanical properties:** | **Test report no. P 3835-15a of Polymer Institute Flörsheim** | |
| Shore D hardness DIN 53505: | ~ 82 Shore D | |
| Adhesive tensile strength DIN EN 1542: | ~ 3.3 N/mm² 100% crack in concrete | |
| Abrasion resist. DIN EN ISO 5470-1: | (Taber) ~ 107 mg/1000 U | |
| Bending tensile str. DIN EN ISO 178: | ~ 39.0 N/mm² | |
| Compression strength DIN EN ISO 604: | ~ 59.5 N/mm² | |
| Impact resistance DIN EN ISO 6272 | ≤ 20 Nm | |
| **Electrostatic properties:** | Measuring voltage 100 V | |
| Resistance to earth DIN EN 1081 | between $10^4$ Ohm and $10^6$ Ohm (see test report) | |
| Resistance to earth DIN EN 61340-4-1 | between $10^4$ Ohm and $10^6$ Ohm (see test report) | |

With compliance with material application between 2.5 up to 3.0 kg/m² max, resistance to earth lies between $10^4$ Ohm and $10^6$ Ohm.
Attention! EP-self-levelling conductive coating does not meet the additional standard as per norm draft DIN ICE 61340-2-1 measurement of personal earthing (system floor-shoes).
The system EP-DF self-levelling coating, conductive complies with all standard requirements.

**On customer request we can provide pigmented bundles!**

## Available bundle sizes 4 K EP- self-levelling conductive coating 1.5 – 2.0 mm

| **Art.-no:** | **Bundle content:** | **Bundle composition:** | | | |
|---|---|---|---|---|---|
| | **Comp. A+B+C+D** | **Comp.A (resin)** | **Comp.B (hardener)** | **Comp.C (filler for 1.5-2.0 mm)** | **Comp.D (pigment powder)** |
| 032001+RAL Nr.-Y58 | **12.806 kg** | 3.336 kg | 1.67 kg | 7.50 kg | 0.30 kg |
| 032001+RAL Nr.-Y59 | **30.735 kg** | 8.015 kg | 4.00 kg | 18.00 kg | 0.72 kg |

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Technical data sheet date 01.10.2010

# 2 K PLASTISTONE® EP – Conductive lacquer WE

| | | |
|---|---|---|
| **Application areas:** | → | As highly conductive intermediate layer under EP self-levelling conductive coating, for producing electrically conductive floors. In production halls, computer rooms, department stores, hospitals, on concrete, screed and magnesite as well as on anhydrite subsoil. |
| | → | Furthermore in bottling plants where flammable air/gas mixtures or flammable liquids are being processed or where an electrostatic charging of the floor surfaces shall be omitted. |
| | → | Mind general advice in catalogue group 1. |
| **Properties:** | → | EP-conductive lacquer is a water-soluble dispersion based on 2K-epoxy resin. |
| | → | Resistance to earth amounts to $10^4$ up to $10^6$ Ohm, in cured state. (Tested acc. to DIN EN 1081 and DIN EN 61340 5-1 / 4-5) |
| | → | EP-conductive lacquer does not contain any solvents (despite water) |
| **Safety data sheets:** | → | On our homepage, domain Shop Articles |
| **Resistance:** | → | See catalogue group 1 Chemical resistance of coating surfaces |
| **Subsurface preparation:** | → | See catalogue group 1 General requirements to subsurface |
| **Primer/ Levelling compound:** | → | Treat the surface with 2K EP-primer or 2K EP-barrier coat according to technical data sheet. |
| | → | After curing of the primer (max.48 hours) on insufficient subsoil evenness, level the surface with 3K EP-fine spattling compound or 2K EP-barrier coat. |
| | → | Once more control the surfaces evenness and effect an intermediate grinding if required, as unevenness has negative effects on conductivity. *Attention!! Do not broadcast intermediate layers!!!!* |
| | → | |
| **Copper strips:** | → | Now paste the self-adhesive copper strips in a distance or pattern of maximum ~ 5 * 5 m onto the floor. |
| | → | On small surfaces up to ~ 100 m², 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. |
| | → | (Also see processing instructions group 3 on the last page) |
| **Processing the EP-conductive lacquer** | → | Discharge hardener component (B) completely into resin component (A) and mix with a suitable agitator for about 2 minutes and let mature for 10 min. Then repot into another pail and mix for another minute. Crosswise roll out the mixture onto the surface with a paint roller directly out of the pail. |
| | → | Do not transgress the processing time of the mixed material of 1.5 hours max at 20°C!! (Shorter on higher temperatures!) |
| | → | *Attention!!* No longer process the mixture even if it does not show a visible alteration. After transgression of this time, the reactivity of the EP-conductive lacquer is no longer given! |
| | → | *Attention!! Do not broadcast intermediate layers!!!!* |
| | → | Accessible and ready for treatment with EP-self-levelling conductive coating after ~ 16 hours at 20°C (indicated times are prolonged on lower temperatures and high air moisture). |
| | → | Slightly grind with a grinding machine after the conductive lacquer has cured for removing dirt particles or other foreign body inclusions, then vacuum the surface! (Grinding the cured EP-conductive lacquer can be replaced by repelling with a steel blade.) |

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# 2 K PLASTISTONE® EP – Conductive lacquer WE

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

| **Product data 2K EP–conductive lacquer WE:** | **Component A:** | **Component B:** |
|---|---|---|
| Viscosity at 23 °C: | ~ 300-500 mPas | |
| Solids content: | ~ 42 % | |
| Mix ratio PBW: | 500 PBW | 100 PBW |
| Mixing time: | 2 min., maturing for 10 min., repot and mix another 1 min. | |
| **Material consumption:** | 0.12 – 0.15 kg / m² with paint roller | |
| Density (mixture): | 1.15 kg / l | |
| Processing time at 20°C: | max. 1.5 h.<br>(do not process longer, property change possible) | |
| Curing time at 20°C: | - Curing times are influenced by air moisture and temperature.<br>- accessible after ~ 16 h, can be overlain after ~ 24 h, chargeable after ~ 48 h<br>- mechanically fully chargeable after 3-5 days and chemically after ~7 days<br>On high air moisture (> 70%) you have to assume a doubling of curing times. Make sure that there is sufficient ventilation immediately after processing. After a curing time (at 20°C) of 72h, overlaying without grinding (alkaline basic cleaning) is no longer possible. | |
| Shelf life: | ~ 12 months at 15°C to 25°C storage temperature | |
| Colour: | black | |
| Cleaner for tools: | Water (if no initial curing has taken place) | |
| **GISCODE:** | RE 1 (epoxy resin products, solvent-free) | |
| **CE Norm** as per DIN EN13813**:** | CE-label: EN 13813 SR-AR1-B3,3 | |
| **Mechanical properties:** | **Test report no. P 3835-15 of Polymer Institute Flörsheim** | |
| As intermediate layer of EP-self-levelling coating, conductive | | |
| **Electrostatic properties:** | Measuring voltage 100 V | |
| Resistance to earth DIN EN 1081 | between $10^4$ Ohm and $10^6$ Ohm | |
| Resistance to earth DIN EN 61340-5-1 | between $10^4$ Ohm and $10^6$ Ohm | |
| With compliance with material application between 0.12 to 0.15 kg/m² , resistance to earth lies between $10^4$ Ohm and $10^6$ Ohm | | |

## Available bundle sizes 2 K EP-conductive lacquer WE

**2 – component bundles (packed compatible in weight to each other):**

| **Art.-no:** | **Bundle content:** | **Bundle composition:** |
|---|---|---|
| 03 25 03 0000-Y83 | **9.00 kg** | Comp.A: 7.50 kg; Comp.B: 1.50 kg |

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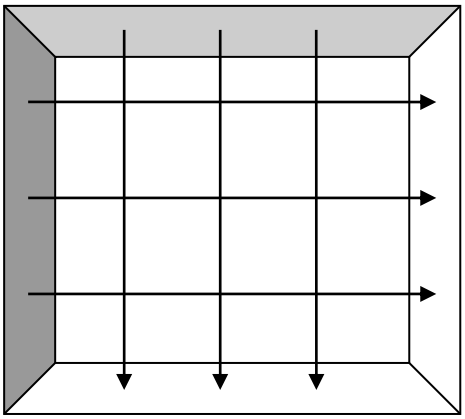
# Assessing the requirement of copper strip

## First way of laying out the copper strip:

Use case: large, rather square surfaces

Base area 400 m² 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
Rule of thumb for lattice layout: per m² 0,5 r.m. of copper strip and you are on the „safe side“.



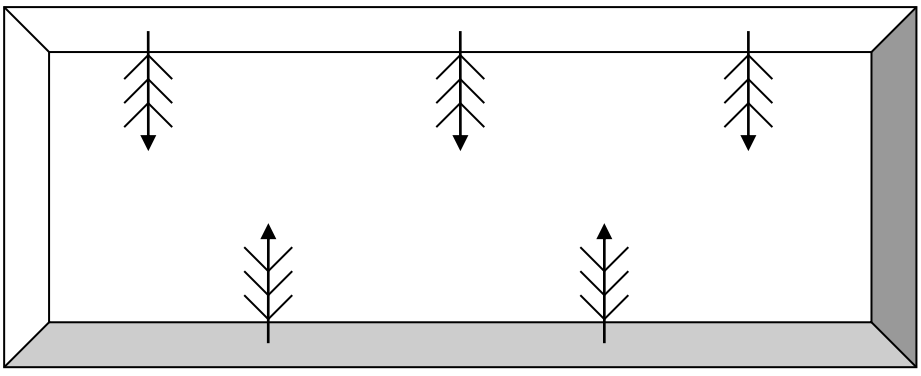
Frequently used ways for connecting the conduction:

- 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 m² (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

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