

Cap-elast

Top-class, plasto-elastic coating system for the renovation of cracked render/plaster facades and concrete surfaces.



Product Description

Field of Application

Cap-elast represents a system of weatherproof, crack covering, plasto-elastic materials for treatment of cracks in render/plaster and concrete surfaces. The Cap-elast system is an exterior coating of outstanding quality and highly protective against environmental effects and aggressive airborne pollutants.

Material Properties

- Water-thinnable, ecologically compatible, low odour.
- Weatherproof.
- CO₂ protection – (s_d CO₂) > 50 m.
- Plasto-elastic, crack-bridging, excellent hiding/covering power.
- Equalises (levels) the substrate.
- Alkali-resistant, hence unsaponifiable.

Cap-elast Phase 1

Fibre-reinforced, plasto-elastic, pigmented material for intermediate coating and bedding/coating of reinforcement fabric.

Cap-elast Dehnspachtel

Thick-film, highly resilient, brush, roller and surfacing base for intermediate coatings on rough-textured substrates. Low temperature elasticity up to – 20 °C.

Cap-elast Phase 2

Silk-matt, white, plasto-elastic finishing coat.

Cap-elast Phase 2-W

Silk-matt, plasto-elastic finishing paint. Provided with a preservative against deterioration in the coating due to algae and mildew growth.

Cap-elast Riss-Spachtel

Plasto-elastic filler for filling cracks in render/plaster and masonry.

Cap-elast Faserpaste

Fibre-reinforced, plasto-elastic, surfacer for equalising uneven substrates before applying subsequent Cap-elast coatings.

Material Base / Vehicle

Synthetic resin dispersion according to DIN 55 945.




Packaging/Package Size

- **Packaging of Standard Products:**
- Cap-elast Phase 1 12.5 litres
- Cap-elast Phase 2 12.5 litres
- Cap-elast Phase 2-W 12.5 litres
- Cap-elast Dehnspachtel 12.5 litres
- Cap-elast Riss-Spachtel 1, 1.5 and 10 kg
- Cap-elast Faserpaste 5 kg



<p>Colours</p>	<ul style="list-style-type: none"> ■ ColorExpress: Cap-elast Phase 2 12.5 litres ■ Cap-elast Phase 1: White. Can be tinted up to 10% with AVA – Amphibolin colourants or CaparolColor. In order to achieve a uniform appearance of surfaces, Cap-elast Phase 1 must be tinted to match the finishing coat in shade (approximately). The material can be tinted via the ColorExpress tinting machine system in shades of all current colour collections up to a luminosity of approx. 70. ■ Cap-elast Dehnpachtel: White. Can be tinted up to 10% with AVA – Amphibolin colourants or CaparolColor. The material can be tinted via the ColorExpress tinting machine system in shades of all current colour collections up to a luminosity of approx. 70. ■ Cap-elast Phase 2 and Phase 2-W: White. Can be tinted up to 10% with AVA – Amphibolin colourants or CaparolColor. The material can be tinted via the ColorExpress tinting machine system in shades of all current colour collections. If more than one can/bucket is manually tinted, all material must be thoroughly mixed before use in order to avoid colour differences. Can be tinted to all current colour collections via ColorExpress tinting machine system. Check tinted material prior to the application to avoid colour differences. Use always tinted material of the same batch, when applying on continuous surfaces. Brilliant, intensive colour shades may have a lower opacity (hiding/covering power). It is therefore advisable to apply a first coat in a similar hiding pastel tint, based on white. Possibly a second finishing coat may be necessary. Colour Resistance according to BFS Data Sheet No. 26: Cap-elast Phase 2 and Phase 2-W Class: A Group: 1 to 3, depending on the shade ■ Cap-elast Faserpaste: White.
<p>Gloss Level</p>	<ul style="list-style-type: none"> ■ Cap-elast Phase 2 and Phase 2-W: Silk-matt, G₂
<p>Storage</p>	<p>Cool, but frost-free.</p>
<p>Technical Data</p>	<p>Characteristics according to DIN EN 1062</p> <ul style="list-style-type: none"> ■ Maximum particle (grit) size: Cap-elast Phase 2 and Phase 2-W: < 100 µm, S₁ ■ Density: Cap-elast Phase 1 Approx. 1.2 g/cm³ Cap-elast Dehnpachtel Approx. 1.15 g/cm³ Cap-elast Phase 2 Approx. 1.3 g/cm³ Cap-elast Phase 2-W Approx. 1.3 g/cm³ Cap-elast Riss-Spachtel Approx. 1.75 g/cm³ Cap-elast Faserpaste Approx. 1.1 g/cm³ ■ Dry film thickness: Cap-elast Phase 2 and Phase 2-W: 100–200 µm, E₃ ■ Diffusion-equivalent air layer thickness s_dH₂O: Cap-elast Phase 2 and Phase 2-W: (s_d-value): ≥ 0,14 - < 1,4 m (medium), V₂ ■ Diffusion-equivalent air layer thickness s_dCO₂: Cap-elast Phase 2 and Phase 2-W: > 50 m, C₁ ■ Water permeability (w-value): Cap-elast Phase 2 and Phase 2-W: (w-Value): ≤ 0,1 [kg/(m² · h^{0,5})] (low), W₃ ■ Crack bridging classes: As the crack types and their treatment descriptions. Tinting may cause variations.

Application

Different Types of Cracks and their Appropriate Treatment with Cap-elast		
<p>Fine Cracks on Surfaces of Render or Concrete (Dry and Shrinkage Cracks): <i>Simple Bridging Treatment</i></p>	<p>Fine Cracks in Render/ Plaster or Concrete: <i>Light Bridging Treatment</i></p>	<p>Cracks in the Vicinity of Vertical and Horizontal Joints and on the Surface of Lightweight Concrete: <i>Heavy Bridging Treatment</i></p>
		
<p>Surface Coating System: Priming coat with Dupa-grund or CapaGrund Universal according to the nature and condition of the substrate.* Intermediate coat with Cap-elast Phase 2 or Cap-elast Phase 2-W. Minimum consumption: 230 ml/m². Finishing coat with Cap-elast Phase 2 or Cap-elast Phase 2-W, undiluted. Minimum consumption: 230 ml/m².</p> <p>Crack bridging according to DIN EN 1062 Class A1 (>100 µm) at 23 °C.</p>	<p>Surface Coating System: Priming coat with Dupa-grund or CapaGrund Universal according to the nature and condition of the substrate.* Intermediate coat with Cap-elast Phase 1, undiluted, tinted to match the finishing coat in shade (approximately). Minimum consumption: 500 ml/m². Finishing coat with Cap-elast Phase 2 or Cap-elast Phase 2-W, undiluted. Minimum consumption: 230 ml/m².</p> <p>Crack bridging according to DIN EN 1062 Class A4 (>1250 µm) at 23 °C.</p>	<p>Surface Coating System: Priming coat with Dupa-grund or CapaGrund Universal according to the nature and condition of the substrate.* First intermediate coat with Cap-elast Phase 1, undiluted. Minimum consumption: 500 ml/m². Second intermediate coat with Cap-elast Phase 1, undiluted, tinted to match the finishing coat in shade (approximately). Minimum consumption: 500 ml/m². Finishing coat with Cap-elast Phase 2 or Cap-elast Phase 2-W, undiluted. Minimum consumption: 230 ml/m².</p> <p>Please Note: On rough-textured substrates intermediate coats can be applied with Cap-elast Dehnpachtel, tinted to match the finishing coat in shade (approximately). Minimum consumption: 1000 – 1500 ml/m², depending on substrate roughness.</p> <p>Crack bridging according to DIN EN 1062 Class A4 (>1250 µm) at 23 °C.</p>

Different Types of Cracks and their Appropriate Treatment with Cap-elast

Single Statical Cracks in the Vicinity of Vertical and Horizontal Joints:
On Smooth Surfaces
Bridging Treatment Reinforced with Stripes of Polyester Fabric



Extensive Statical Cracks:
On Smooth Surfaces
Bridging Treatment Reinforced with Polyester Fabric



Extensive Statical Cracks:
On Rough-Textured Surfaces
Bridging Treatment Reinforced with Cap-elast Dehnspachtel



Pre-Treatment:

Widen the statical/constructional crack at least 1 cm in width and depth (U-shaped) and remove dust. Prime generously with Dupa-grund to the point of saturation. Fill the crack with Cap-elast Riss-Spachtel, flush with the surface, then texture to match the aspect of surrounding surface. Allow crack filler to dry well.

Surface Coating System:

Priming coat of the complete surface with Dupa-grund or CapaGrund Universal, according to the nature and condition of the substrate.*

Reinforcement with Stripes of Fabric on Smooth Surfaces:

Apply Cap-elast Phase 1 generously on the filled crack, min. 30 cm wide. Bed Elastic-Fabric 10/10, e.g. supplied by Kobau, avoiding creases, into the still wet material, min. 20 cm wide.

After drying apply an **intermediate coat** of Cap-elast Phase 1 on the complete surface, tinted to match the finishing coat in shade (approximately).

Minimum consumption: 500 ml/m².

Apply a **finishing coat** of undiluted Cap-elast Phase 2 or Cap-elast Phase 2-W on the complete surface.

Minimum consumption: 230 ml/m².

Crack bridging according to DIN EN 1062 Class A5 (>2500 µm) at 23 °C.

Pre-Treatment:

Widen the statical/constructional crack at least 1 cm in width and depth (U-shaped) and remove dust. Prime generously with Dupa-grund to the point of saturation. Fill the crack with Cap-elast Riss-Spachtel, flush with the surface, then texture to match the aspect of surrounding surface. Allow crack filler to dry well.

Reinforcement with Polyester Fabric on Smooth Surfaces:

Priming coat with Dupa-grund or CapaGrund Universal, according to the nature and condition of the substrate.*

Bedding of Polyester Fabric:

Apply Cap-elast Phase 1, diluted with approx. 5% of tap (potable) water, on an area corresponding to sheet-width of polyester fabric. Apply the material evenly with brush or paint roller.

Minimum consumption: 400 ml/m². Press Elastic-Fabric 10/10, e.g. supplied by Kobau, into the still wet bedding material Cap-elast Phase 1, either with a stainless steel trowel or a rigid foam (Moltopren) roller, working from top to bottom and taking care to prevent bubbles and forming of creases. Let fabric borders overlap by approx. 5 cm. Allow the reinforced area to dry well.

Apply an **intermediate coat** on the reinforced surface with Cap-elast Phase 1, diluted approx. 5 % with tap water, and tinted to match the finishing coat in shade (approximately).

Minimum consumption: 350 ml/m².

Finishing coat with Cap-elast Phase 2 or Cap-elast Phase 2-W, undiluted.

Minimum consumption: 230 ml/m².

Crack bridging according to DIN EN 1062 Class A5 (>2500 µm) at 23 °C.

Pre-Treatment:

Widen the statical/constructional crack at least 1 cm in width and depth (U-shaped) and remove dust. Prime generously with Dupa-grund. Fill the crack with Cap-elast Riss-Spachtel, flush with the surface, then texture to match the aspect of surrounding surface. Allow crack filler to dry well.

Reinforcement with Polyester Fabric on Rough-Textured Surfaces with Statical / Constructional Crack:

Priming coat of the complete surface with Dupa-grund or CapaGrund Universal, according to the nature and condition of the substrate.*

First intermediate coat

Trowel or roller application of Cap-elast Dehnsachtel, undiluted.

Minimum consumption: 1500 – 3000 ml/m².

Second intermediate coat

Roller application of Cap-elast Dehn-spachtel, diluted 5 to 10% with tap water, levelling the texture.

Minimum consumption: 800 – 1200 ml/m².

1 – 2 finishing coats

of Cap-elast Phase 2 or Cap-elast Phase 2-W, undiluted.

Minimum consumption per coat: 230 ml/m².

Crack bridging according to DIN EN 1062 Class A4 (>1250 µm) at 23 °C.

Suitable Substrates	The substrate must be sound, dry, clean, and free from all materials that may prevent good adhesion. In Germany: Follow VOB, part C, DIN 18 363, paragraph 3.
Substrate Preparation	<p>Renders/Plasters Class P II Lime-Cement Mortars, Class P III Cement Mortars: New renders/plasters must be left untreated for a sufficiently long time, normally for 2 weeks at 20 °C and 65% relative humidity. Adverse weather conditions, influenced e.g. by wind or rain, extend the curing process and a correspondingly longer idle period must be respected. The risk of calcareous efflorescence can be reduced by an additional priming coat of CapaGrund Universal and the finishing render/plaster coat may be coated after a waiting time of 7 days.</p> <p>Existing renders/plasters: Repairs must have adequate time to cure and dry. Clean surfaces with a high pressure water jet, in compliance with the regulations. Prime with Dupa-grund (follow Technical Information No. 652).</p> <p>Concrete: Concrete surfaces with deposits of dirt or fines/sintered layer must be cleaned mechanically or with high-pressure cleaning equipment (pressure washer), in compliance with the regulations. Apply a priming coat of CapaGrund Universal on slightly absorbent or smooth surfaces (Technical Information No. 657). Prime chalking, sanding or absorbent surfaces with Dupa-grund.</p> <p>Sound Coatings of Enamel or Dispersion Paint: Roughen glossy surfaces and enamel coatings. Clean chalking dispersion paint coatings by high-pressure water jet (hydraulic blasting), in compliance with the regulations. Apply a priming coat of CapaGrund Universal. Prime with Dupa-grund, when the surface is cleaned by other methods.</p> <p>Sound Existing Plasto-Elastic Dispersion Paint Coatings: Clean the surface either with a high-pressure water jet in compliance with the regulations or by washing with water adding usual wetting agents and then hose down. Apply a priming coat of CapaGrund Universal. Apply an intermediate coat and a finishing coat of Cap-elast Phase 2, silk-matt, or use PermaSilan, matt (Technical Information No. 161).</p> <p>Sound Synthetic Resin-Bound Render/Plaster Coatings Excluding Thermal Insulation Composite Systems (ETICS/EWI): Clean existing renders/plasters by suitable means and allow wet surfaces to dry well. Apply a priming coat of CapaGrund Universal.</p> <p>Unsound Coatings of Enamel, Dispersion Paint or Synthetic Resin-Bound Render/Plaster: Remove unsound coatings completely by suitable means, e.g. mechanically or with paint stripper and clean the surface with a steam jet in compliance with the regulations. Allow the surface to dry well. Prime slightly absorbent or smooth substrates with CapaGrund Universal. Prime chalking, sanding, absorbent substrates with Dupa-grund.</p> <p>Unsound Mineral Coatings: Remove completely (abrade, brush off, scrape off, hydraulic blasting), in compliance with the regulations, or by other suitable methods. In case of wet cleaning allow the substrate to dry well before any further treatment. Prime with Dupa-grund.</p> <p>Surfaces Stained by Air Pollution (Factory Fumes) or Soot: Clean by suitable means, e.g. with high pressure water-jet, in compliance with the regulations, and allow the substrate to dry well.</p> <p>Surfaces Attacked by Mildew and Algae: Remove mildew/mould or algae attack by wet-blasting in compliance with the regulations, then treat the surface with Capatox or FungiGrund and allow to dry well. The application of a finishing coat with Cap-elast Phase 2-W is recommended to prevent a new mildew/mould or algae attack.</p> <p>Fair-Faced Brick Masonry with Joint Cracks: Open defective, cracked joints approx. 10 mm deep, prime with Dupa-grund, and allow to dry well, then fill with Cap-elast Rißspachtel. Allow to dry well. If brown discolouration appear on the inter-mediate coat, apply the water-free, solvent-based paint Duparol for finishing coat (Technical Information No. 150).</p> <p>Surfaces with Salty Efflorescence: Remove salty efflorescence thoroughly with a dry brush and prime with Dupa-grund. Coating of such surfaces must be considered a risk for which we cannot accept responsibility, since even after the most thorough treatment the efflorescence may recur.</p>
Method of Application	Cap-elast Phase 1 / Cap-elast Phase 2-W Apply with paint brush or roller.

	<p>Cap-elast Dehnpachtel Apply with stainless steel smoothing trowel, paint brush or roller. For brush or roller application: Dilute 5 – 10% with tap (potable) water, depending on the substrate roughness. For trowel application: Apply the undiluted material and immediately after having finished the filler application procedure roll over treated surfaces with a fine-porous Moltopren® roller (made of rigid foam).</p> <p>Cap-elast Phase 2 Apply with paint brush, roller or spraying equipment.</p> <p>Airless Application: Spray angle: 50° Nozzle size: 0.026" – 0.031" Spray pressure: 150 bar Clean tools immediately after use with water.</p> <p>Cap-elast Faserpaste Apply with stainless steel smoothing trowel. Apply undiluted and stir up before starting work.</p>
Consumption	<p>Cap-elast Phase 1 Minimum 500 ml/m² per coat.</p> <p>Cap-elast Dehnpachtel Minimum 1000 ml/m² per coat.</p> <p>Cap-elast Phase 2 / Phase 2-W Minimum 230 ml/m² per coat.</p> <p>Capamix Cap-elast Minimum 300 g/m² per coat.</p> <p>Cap-elast Faserpaste Minimum 1.1kg/m² per mm of layer thickness.</p>
Application Conditions	<p>Lower Temperature Limit for Application and Drying: + 8 °C for material, substrate and ambient air.</p>
Drying/Drying Time	<p>Cap-elast Phase 1 and Cap-elast Dehnpachtel At + 20 °C and 65 % relative humidity, surface-dry and recoatable after 24 hours.</p> <p>Cap-elast Phase 2 / Phase 2-W At + 20 °C and 65 % relative humidity, rainproof after 24 hours. Lower temperatures and higher humidity extend the drying time.</p> <p>Cap-elast Faserpaste Depending on atmospheric humidity, temperature and layer thickness. Approx. 24 hours per mm layer thickness at + 20 °C and 65 % relative humidity.</p>
Note	<p>Like other facade paints, Cap-elast system materials must not be applied under a glaring sun, in strong wind, fog, high relative humidity, imminent rain or impending night frost. In order to avoid lapping, care should be taken to apply the material wet-on-wet without interruptions.</p> <p>Stir well and sieve the material before airless application. Do not apply on horizontal surfaces exposed to rain or moisture. Do not apply on calcareous (high lime) substrates and lightweight renders/plasters. Mechanical loads/scratching on matt façade paints in dark shades may produce bright-toned stripes as a product specific property (no writing resistance).</p> <p>In case of moist weather conditions (rain, dew, fog) yellowish transparent traces of additives, showing a slightly glossy shine and stickiness, may occur on the surface of compact, cool substrates or by means of delayed drying caused by the weather. These traces of additives are water-soluble and will disappear under the influence of a sufficient water quantity, e.g. repeated intensive rainfalls. The quality of the dried coating will not be affected by these changes.</p> <p>In case of direct reworking, all traces of additives must be pre-wetted and completely removed after a short reaction time. An additional priming coat of CapaGrund Universal must be applied. The traces cannot occur when the material is applied under suitable climatic conditions.</p> <p>Touching up surfaces is depending on many parameters and may be visible after drying. (In Germany: See BFS Data Sheet No. 25)</p> <p>Statical/constructional cracks are liable to extreme movements. Therefore a durable and invisible crack bridging treatment by paint material is impossible. Using the Desoi Spiral Anchoring System, traction and shear stress in masonry may be absorbed. The spiral anchor works like a highly winded spring in linear zones. Detailed information: Desoi GmbH, Fax: (+49) 0 66 55 / 96 36 66 66</p> <p>Joints on windows, doors and window sills must be skilfully treated with appropriate permanently elastic sealing compound.</p> <p>Facades in special climatic conditions (high degree of moisture) or subjected to a higher influence of atmospheric exposure: It is recommended to apply our special product Cap-elast Phase 2-W with algicidal and fungicidal agents to retard the forming of organic growth (fungi & algae).</p>

Cap-elast Phase 2-W is provided with a preservative against deterioration in the coating due to algae and mildew growth and offers a long-lasting protection, but the algicidal & fungicidal effect is limited by the special facade conditions, e.g. intensity of attack and moisture loads. Thus, a durable protection cannot be guaranteed.

Advice

German Certificates

- Cap-elast Phase 1 und 2 Bestimmung der Wasserdampfdiffusion und der Wasserdurchlässigkeit mit Grundbeschichtung Dupa-grund
- Cap-elast Phase 1 und 2 Bestimmung der Wasserdampfdiffusion und der Wasserdurchlässigkeit mit Grundbeschichtung CapaGrund
- Cap-elast Phase 2 Bestimmung der Wasserdampfdiffusion und der Wasserdurchlässigkeit mit Grundbeschichtung Dupa-grund
- Cap-elast Phase 2 Bestimmung der Wasserdampfdiffusion und der Wasserdurchlässigkeit mit Grundbeschichtung CapaGrund
- Cap-elast Phase 2 Bestimmung der Kohlenstoffdioxid-Diffusionsstromdichte
- Cap-elast 2 Bestimmung der Wasserdampf- und CO₂-Durchlässigkeit

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)

Special Risks and Safety Advice (only relevant for Cap-elast Phase 2-W):
 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Keep out of reach of children.
 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water.
 Do not empty into drains, water courses and onto the ground. If swallowed, seek medical advice immediately to avoid harm to the intestinal bacteria. Apply by brush or paint roller only.
 Further information: See Safety Data Sheets.

Please Note (Status as at Date of Publication)

Keep out of reach of children. In case of contact with eyes or skin, rinse immediately with plenty of water. During spray application: Do not breathe/inhale spray dust. Do not empty into drains, water courses and onto the ground.
 Further information: See Safety Data Sheets.

Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Particular attention should be made to removing wastage from site in compliance with standard construction site procedures. In Germany: Only completely emptied containers should be given for recycling.
 Dispose containers with residues of liquid material as remnants of water-based paints and dried material as hardened paints waste or via domestic waste.

EU limit value for the VOC content

Cap-elast Phase 2
 (Kat. A/c): 40 g/l (2010). Dieses Produkt enthält max. 40 g/l VOC.

Cap-elast Phase 2 W
 (Kat. A/c): 40 g/l (2010). Dieses Produkt enthält max. 35 g/l VOC.

Cap-elast Phase 1
 (Kat. A/c): 40 g/l (2010). Dieses Produkt enthält max. 30 g/l VOC.

Product Code Paints and Enamels

Cap-elast Phase 1:
 M-DF02

Cap-elast Dehnpachtel:
 M-DF02

Cap-elast Phase 2:
 M-DF02

Cap-elast Phase 2-W:
 M-DF02F

Cap-elast Riß-Spachtel:
 M-DF02F

Cap-elast Faserpaste:
 M-DF02

Substances of Content - Declaration

Cap-elast Phase 1:
 Polyvinyl acetate resin dispersion, titanium dioxide, calcium carbonate, silicates, water, film forming agent, additives, preservatives.

Cap-elast Dehnpachtel:
 Acrylic resin dispersion, titanium dioxide, silicates, water, aliphatic compounds, additives, preservatives.

Cap-elast Phase 2:
 Polyvinyl acetate resin dispersion, titanium dioxide, silicates, calcium carbonate, water, film forming agent, additives, preservatives.

Cap-elast Phase 2-W:

Polyvinyl acetate resin dispersion, titanium dioxide, silicates, calcium carbonate, water, film forming agent, additives, preservatives, film preservative.

Cap-elast Riss-Spachtel:

Acrylic resin dispersion, silicates, calcium carbonate, water, additives, preservatives.

Cap-elast Faserpaste:

Polyvinyl acetate resin dispersion, titanium dioxide, silicates, calcium carbonate, synthetic fibres, water, film forming agent, additives, preservatives.

Further Details	See guidelines on the container label.
Technical Assistance	As it is impossible to list herein the wide variety of substrates and their specific problems, please request our technical assistance in case of queries. We will describe appropriate working methods, if a substrate not specified above is to be coated.
Customer Service Centre	Tel.: (+49) 0 61 54 / 71 17 10 Fax: (+49) 0 61 54 / 71 17 11 e-mail: kundenservicecenter@caparol.de International Distribution: Please see www.caparol.com

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All suggestions and application instructions herein are based on our latest technical experience. Due to the wide variety of individual project conditions, we cannot be held responsible for their content. These instructions do not release the purchaser/ applicator from his responsibility to determine the suitability of the product in consideration of the project characteristics. These instructions are to be considered void when a new edition is released. Our general conditions of sale and delivery in their latest edition apply. This document is a translation of our German Technical Information No. 160 · Cap-elast · Issued: January 2010

DAW International Business: **Deutsche Amphibolin-Werke von Robert Murjahn Stiftung & Co KG** · P.O.B. 1264 · D-64369 Ober-Ramstadt · Tel. +49 6154 71-1274
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