

DUROCAL 90

2-component polyurethane top coat, high gloss, solvent-based, for interior and exterior applications

Technical information Version
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SYSTEMLACK



swiss  quality

Durocal 90 has outstanding weather resistance and resistance to fading. This top coat stands out for its excellent adhesion, hardness, abrasion resistance and durability. Rapid surface and through drying enable users to work cost-effectively. Once hard, the coating offers high mechanical and chemical resistance. Hardening relies on an aliphatic isocyanate. Durocal 90 is characterised by very low overspray formation.

Beschreibung

Areas of application For painting commercial vehicles, plant and machinery, metal façades and metal structures. Furthermore, it can be used to paint doors or kitchen unit fronts. It can also be applied to walls and floors. Durocal system paint is perfectly formulated for matching a large range of IGP powder coatings.

Core data

Properties	Delivery viscosity	Pasty (stir well before use)
	Density	Approx. 1 kg/l
	Solid state	Comp. A; Approx. 50 % (white) Mixed: Approx. 53 % (white)
	Texture	Smooth
	Mixing ratio	4 : 1 by weight 8 : 1 by weight (Durocal Rollhärter) Please refer to the "Information/Important" chapter.
	Temperature resistance	Constant 130 °C exposure: Short-term 160 °C exposure:
	Pot life	Approx. 2 h (undiluted)
	Gloss level	High gloss
	Flash point	23 °C
	Tintable	Can be tinted according to RAL, NCS or sample with Spaceline system, manual tinting up to max. 3% possible with suitable universal tinting pastes
	Storage life	Store in well-sealed original container for 2 years at 5 - 25°C.

Processing temperature	Do not process below + 5°C (object temperature), ideal temperature range 15 - 22°C.
	Protect from direct sunlight.
Environmental label	G
Highlight	2-component polyurethane-based top coat

Substrate / Processing

Substrates	The substrate must be prepared according to the usual requirements: free from rust, grease, oil and scale; clean, dry and well set (residual moisture max. 3%). Depending on the type of substrate (metal, wood, plastic), suitable pre-treatment or primer coating is necessary. Any cement or calcareous sinter must be removed. Anhydrite floors must first be milled off down to a load-bearing depth.	
Application	Spray application, can be diluted with 10–20% cellulose thinner, universal thinner or Durocal thinner. The spray pattern and the colour of effect colours (metallic, pearl) are significantly influenced by the application conditions: 1. Nozzle width of the spray gun and spraying pressure: Atomisation is finer with a smaller nozzle width and a higher spray pressure. Consequently, the colour becomes lighter. 2. Dilution and spray viscosity: A dilution that evaporates more quickly often leads to an increase in the brilliance of the metallic effect. The tendency towards cloud formation increases with the viscosity. 3. Spray method: Dry spraying or heavy misting: The colour appears lighter and more metallic. Wet spraying: The colour appears fuller and darker. Cloud formation is prevented by incorporating intermediate flash-off times. 4. Spray gun distance: Short distance: The sprayed film is wetter, the colour is darker and more intensive. Greater distance: The sprayed film is drier, the colour is lighter and more metallic. Application to concrete/cement: - Pre-treat the substrate mechanically - 1st coat: Durocal 90 (approx. 25% diluted) - 2nd coat: Durocal 90 (0–15% diluted)	
Drying	Dust-dry (TG1) Touch-dry (TG4) Reworkable Fully dried	After approx. 30 minutes After approx. 8 hours After approx. 2 - 3 hours After approx. 8 days The drying time depends on the relative air humidity, air and object temperatures and coating thickness. The data was determined for standard conditions at 20°C room temperature and 65% relative humidity. The hardening of the film can be greatly accelerated by raising the temperature (30–90 minutes at 60–85°C) (it is essential to observe a flash-off time of at least 20 minutes).
Coverage	8 – 10 m ² /kg Consumption depends on the application method, the texture of the substrate and the coating thickness. The stated values are average figures from practice.	
Tool cleaning	Clean immediately and thoroughly with thinner (e. g. universal or cellulose thinner).	

Information

Hazard warnings	For further information see the corresponding EU safety data sheet.
Further information	The SMGV information sheets and the FSO guidelines must be observed.
Important	▪ Compatible with roller-applied hardener: Durocal 50 ▪ Compatible with roller-applied hardener to an extent: Durocal 10/30/70/90 (watch out for streaks and spots) ▪ Not compatible with roller-applied hardener: Durocal 30 Struktur / Durocal 70 Struktur ▪ Electrostatically processable ▪ Temperature resistance short-term exposure 160°: optical changes can also occur at lower temperatures. However, functionality is still guaranteed.

Quality and environment



The Spaceline tinting system is the ideal colour mixing solution for today's needs. It cuts your costs for expensive storage and gives you new flexibility of supply. Spaceline paint concentrates are universal colour pastes with high-quality pigmentation. You can use them to produce RAL, NCS, IGP and many other colours with the DOLD Spaceline tinting system.



System coatings for coordinated surfaces in terms of colour, gloss, effect and texture. This is made possible by DOLD's wet paint expertise and IGP's powder coating expertise. In many areas of application, adjacent components of an object are made up of materials that are produced by different suppliers and finished by different coaters. In such cases, system coatings from DOLD and IGP create colour consistency and aesthetics. Comprehensive coating solutions from a single source - advice and service included.



With the environmental label, coating materials can be identified in a transparent and clear scheme according to environmental and health protection criteria, as well as suitability for use. The environmental label creates transparency for the builder, architect, planner and client. All products of Dold AG are classified in the category A to G.



Dold AG was founded on August 01, 1921 by Hans Dold in Wallisellen. Until Dold is still located at the same site and is one of the leading paint and varnish manufacturers in paint manufacturers in Switzerland. In Wallisellen, Dold AG develops and manufactures its innovative range of paints and varnishes for the construction painter as well as for industrial customers.



Swiss paint and varnish factory certified according to ISO 9001 / 14001 / 45001. Dold AG is one of the few paint and varnish factories which not only has its quality management, management, but also its environmental management system, as well as the occupational safety and health protection processes have been certified. These certifications are a clear commitment for Dold AG towards all its commitment to all its stakeholders.



Environmentally friendly products are a concern for DOLD. The foundation KMU Clima confirms Dold AG's contribution to voluntary climate protection. For this concern all direct emissions of CO₂ in form of electricity, heating and mobility are compensated by DOLD to a reforestation project in Uruguay. This is a long-term contribution to climate protection and for the sake of the environment.

The above information is for general guidance only. The working conditions beyond our control and the large number of different substrates mean that no claims can be made on the basis of this information. In case of doubt, we recommend that you carry out sufficient tests yourself. A guarantee can only be given for the consistently high quality of our products. All previous editions of this data sheet hereby lose their validity.