

TECHNICAL DATA SHEET

CL ACR 13 HFP Acrylic Finish

Fast-drying, high-flash-point, high-gloss acrylic topcoat

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Chemistry / role	Acrylic · Topcoat
System	Single component

SECTION 1 PRODUCT DESCRIPTION

Safe, high-flash-point, single-component, air-drying thermoplastic acrylic coating based on high-weather-resistance thermoplastic acrylic resin, imported pigments, fillers, wetting and dispersing agents and environmentally friendly solvents.

Unlike ordinary low-flash-point acrylic paints it has a high flash point, low volatility and a mild odour, with excellent outdoor weathering, colour and gloss retention and waterproof, rust-proof properties. It needs no curing agent, dries at room temperature and is a universal high-gloss decorative and protective topcoat for hardware, machinery, equipment, steel structures, plastic parts and outdoor workpieces.

SECTION 2 KEY FEATURES

- High flash point, high safety: slow-evaporating, low odour, low irritation; suitable for factory areas, assembly lines and enclosed spaces.
- Single component, air-drying: stir and use; no mixing errors and high application tolerance.
- Fast drying: quick surface dry for assembly-line shipping; resists dust pick-up.
- High gloss and fullness: excellent levelling; gloss of 9 or more achievable under normal application, with little natural gloss loss.
- Excellent weather resistance: resists UV, chalking and yellowing; keeps gloss and colour outdoors.
- Excellent adhesion to steel, ABS plastic, wood and primer layers.
- Stable physical properties: high hardness, abrasion resistance, good flexibility, slight acid/alkali and fresh-water resistance.
- Good storage stability: resists coarsening, settling and flocculation; small colour difference after long storage.

SECTION 3 SCOPE OF APPLICATION

Decoration and anti-corrosion protection of industrial machinery and equipment, hardware, steel structures, cabinets, guardrails, outdoor facilities, plastic workpieces and handicrafts.

SECTION 4 COLOURS

White · Bright Red · Medium Yellow · Medium Green · Peacock Blue · Medium Blue · Orange Red · Orange Yellow · Medium Gray · Black · Iron Red · Brown · Custom colours on request

SECTION 5 TECHNICAL DATA

Typical values from factory production batches; may vary slightly with colour. Valid for the mixed coating only.

No.	Property	Specification	Test method
1	State in container	Uniform, easy to stir	GB 3186-82
2	Viscosity	≥ 60	GB/T 1723-93
3	Fineness	≤ 35 μm	GB 6753.1-86
4	Non-volatile content	≥ 60 %	GB/T 6751
5	Workability	No abnormality	GB 1757-79 (89)
6	Surface-dry time	30 min	GB/T 1728 Method B
7	Hard-dry time	12 h	GB/T 1728 Method B
8	Baking time	60 min at 60 °C	GB 93-8827
9	Film colour and appearance	Complies with standard sample; smooth film, uniform colour	GB 9761-88
10	Cross-cut adhesion	Grade 1 pass	GB/T 9286-1998
11	Pencil hardness	HB pass	GB/T 6739-1996
12	Water resistance	No obvious change after 240 h immersion	GB/T 1733-93 Method A
13	Engine-oil resistance	No obvious change after 240 h immersion	GB 9274-88 Method A

SECTION 6 FILM THICKNESS AND COVERAGE

Dry film thickness (DFT) per coat	35–55 µm
Wet film thickness (WFT) per coat	55–80 µm
Theoretical coverage	3–8 m ² /L

SECTION 7 SURFACE PREPARATION

1. All surfaces must be clean, dry and free of contaminants to ensure lasting adhesion of the next coat.
2. Steel: abrasive blast to Sa 2½ or hand/power-tool clean to St 3; surface profile 40–70 µm; keep clean and dry.
3. Apply the primer within 4 hours of reaching the above standard; re-treat any surface not coated in time.
4. Before applying the next coat, confirm the surface is clean and dry. Substrate temperature 0–50 °C and at least 3 °C above dew point; relative humidity not above 85 %.

SECTION 8 MIXING AND APPLICATION

Application methods: Spraying (air or airless); Brushing; Rolling. Ensure the specified dry film thickness is achieved.

Dilution ratio (by weight)	Paint : special acrylic thinner = 100 : 20–35
Standard spray viscosity	16–18 s at 25 °C (Ford cup No. 4)
Thinner	Safe environmental thinner or safety-type thinner
Gun nozzle diameter	1.3–1.5 mm
Spray air pressure	0.35–0.45 MPa
Spray distance	15–20 cm
Number of coats	2 thin coats, wet-on-wet
Flash-off / interval time	5–8 minutes

SECTION 9 COMPATIBILITY

Primer	Epoxy primer; Acrylic primer; Anti-rust primer
Topcoat	—

SECTION 10 PACKAGING

Pack size	Net weight	Notes
TBC	TBC	Typical factory pack sizes; may vary by region

Typical factory reference packaging; pack sizes and volumes may vary by region due to local regulations.

SECTION 11 STORAGE AND SHELF LIFE

Storage environment	Cool, dry, well-ventilated; 5–30 °C; away from fire and heat sources
Precautions	Protect from sunlight, freezing and open-air stacking
Shelf life	12 months in original sealed container under normal storage
After opening	Use as soon as possible; prolonged exposure causes moisture absorption, evaporation and thickening

SECTION 12 SAFETY PRECAUTIONS

1. Maintain ventilation during application; wear a mask, gloves and protective clothing.
2. Avoid contact with eyes and skin; in case of contact, rinse immediately with clean water.
3. Keep out of reach of children.
4. Dispose of waste paint and solvents in accordance with industrial hazardous waste regulations.

Refer to the Safety Data Sheet (SDS) for full hazard, first-aid and disposal information.

SECTION 13 DISCLAIMER

The information in this data sheet is based on our laboratory knowledge and practical experience. The product is considered a semi-finished product and its use is generally beyond our control; we therefore guarantee only the quality of the product itself.

To comply with local regulations the product may be adjusted, and we reserve the right to modify this data sheet without further notice. Users should seek specific guidance on product suitability for their own needs and applications.