Carbocrylic 3313 Topcoat

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Water-based acrylic
Description	Low VOC, low odor water-based topcoat providing an excellent and smooth finish. For indoor and outdoor use in general industry for the protection and decoration of surfaces. Versatile in terms of air drying or forced drying. Its high weather resistance allows it to be used as protection for exposed elements such as metal structures, boiler work, machinery, etc. Adhesive finish on ferrous and non-ferrous metals, such as galvanised steel, aluminium and other substrates. It can be applied directly with the appropriate surface preparation for non-severe indoor exposure or with the appropriate primer recommended by Carboline for other services.
Features	• Good resistance to weathering and yellowing. • Good corrosion protection. • Excellent colour and gloss retention. • Easy to apply, allowing brush or roller application without sagging. • Flexible finish with hardness and resistance to ageing. • Good durability and maintenance. • Resistant to impact, abrasion and cleaning products, making it suitable for healthcare environments such as hospitals, nursing homes and public centres.
Color	Most RAL colours and others available on request.
Finish	• Satin • Gloss • Matte
Primer	Carbocrylic 3312 Primer
Dry Film Thickness	40 - 50 microns (1.57 - 1.97 mils) per coat
Solids Content	By Volume 48% +/- 2%
Theoretical Coverage Rates	9.6 m^2/l at 50 µm (2 mil) Not including losses during mixing and application.
VOC Values	**As Supplied** : 37.6 g/l
Dry Temp. Resistance	Continuous: 100°C (212°F) Non-Continuous: 120°C (248°F)
Limitations	Not recommended for immersion service.

SUBSTRATES & SURFACE PREPARATION

General	The surface must be clean and dry. Use appropriate methods to remove dirt, dust, oil and all other contaminants that may interfere with paint adhesion.
Steel	Apply over the primer recommended by Carboline. May be applied directly to steel prepared for non-severe indoor exposures ISO 8501-1 Sa 2 (SSPC-SP6) with a surface roughness profile of 25-50 microns (1.0-2.0 mils). ISO 8501-1 grade St2 or St3 (SSPC-SP2 or SP3) as a minimum requirement. Consult Carboline Technical Service for more information.

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Previously Painted Surfaces	Lightly sand or roughen the surface and blend to remove gloss. Existing paint must achieve a minimum rating of 3A according to the ASTM D3359 "X-Scribe" adhesion test.
Non-Ferrous Metals	Apply over the primer recommended by Carboline. It can be applied directly for non-severe exposures with a surface roughness profile of 25 to 50 µm (1.0 to 2.0 mils), best achieved through abrasive blasting in accordance with SSPC-SP 16. Consult Carboline Technical Service for more information.

MIXING & THINNING

Mixing	Mix until a uniform consistency is achieved. Avoid excessive air entrapment.
Thinning	Spraying: Up to 5% with potable water.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General)	Pressure vessel equipped with dual regulators, material hose with a minimum internal diameter of 12.7 mm (1/2"), fluid tip with an internal diameter of 1.2-1.8 mm (0.05-0.07") and suitable air cap.
Conventional Spray	Pressure vessel equipped with dual regulators, material hose with a minimum internal diameter of 12.7 mm (1/2"), fluid tip with an internal diameter of 1.5 mm (0.06") and suitable air cap.
Airless Spray	Pump ratio: 30:1 (minimum) Output flow rate: 11.36 LPM (3.0 GPM) (minimum) Material hose: 9.53 mm (3/8") internal diameter (minimum) Nozzle size: 0.43-0.48 mm (0.017"-0.019") Outlet pressure: 124-145 mm (1800-2100 psi) Filter size: 250 microns (60 mesh) Teflon gaskets are recommended and are available from the pump manufacturer.
Brush	Recommended for touch-ups and small areas.
Roller	It is recommended to apply in thin layers with a short-pile roller to avoid foam formation.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	30°C (86°F)	30°C (86°F)	30°C (86°F)	80%

Do not apply when the surface temperature is below 3°C (5°F) above the dew point. Do not apply if temperatures are expected to fall below 10°C (50°F) within 24 hours of application.

CURING SCHEDULE

Surface Temp.	Touch Dry	Dry to Recoat
10°C (50°F)	2 Hours	18 Hours
15°C (59°F)	75 Minutes	18 Hours
20°C (68°F)	50 Minutes	16 Hours
24°C (75°F)	40 Minutes	16 Hours

These times are based on a dry film thickness of 50 microns at 50% relative humidity. High humidity, increased film thickness, insufficient ventilation, or cooler temperatures will extend handling and recoat drying times due to slower water evaporation rates. Water-based acrylics are sensitive to humidity during the curing process and are susceptible to damage from handling. The maximum recoat time is unlimited with the previous coat in optimal condition.

CLEANUP & SAFETY

Cleanup	Use clean potable water followed by a suitable solvent to dry the equipment. In case of spillage, absorb and dispose of in accordance with applicable local regulations.
Safety	Read and follow all cautionary warnings on this Product Data Sheet (PDS) and the Safety Data Sheet (SDS) for this product. Use normal safety precautions. Use adequate ventilation. Keep container closed when not in use.

PACKAGING, HANDLING & STORAGE

Shelf Life	12 months at 24°C (75°F) *Shelf life: (actual declared shelf life) when stored under recommended storage conditions and in unopened original packaging.
Shipping Weight (Approximate)	Container: 20 litres (23 kg).
Storage Temperature & Humidity	5°C-35°C (41°F - 95°F) 0-95% Relative Humidity
Flash Point (Setaflash)	93°C (200°F)
Storage	Store indoors.

WARRANTY

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