carboline®
Coatings - Linings - Fireproofing

Original Equipment Manufacturer's System Guide

Coatings and Linings

Carboline has hundreds of coatings that can be used to protect equipment from corrosion. The ability of a coating system to provide long term performance and appearance is largely dependent on its ability to provide good corrosion resistance (undercutting resistance) and weathering properties (color and gloss retention). These properties are (usually) the primary selection criteria for OEM coating systems. Application properties (speed of cure, topcoat times and dry to handle times) are often equally important from an operations/application standpoint. And finally; a coating/system must be compliant to local, state and federal volatile emission regulations. This guide was developed to help the user select the most appropriate system using some of the more common Carboline products. Consult your local Carboline representative for other options and specific needs.

Corrosion Resistant Primers

TYPE	PRODUCT	CORROSION RESISTANCE	DRY TO TOPCOAT	SBV	VOC (G/L)	HAP'S (LBS/SOL GAL)	PRIMARY FEATURES
Alkyds							
Carbocoat	8239	Fair	30 min	56%	335	0	Fast dry alkyd primer Economical
	8287 WR	Fair	30 min	32%	327	0.32	Water-reducible Fast dry alkyd primer Economical
	8229	Good	30 min	52%	268	0.6	Universal primer Fast dry
	153	Good	30 min	52%	245	0.25	Universal primer VOC <250 g/l
Epoxies							
Carboguard	8922	Very good	5 min	61%	335	3.01	Contains zinc phosphate Wet-on-wet capability
	8922 LH	Very good	5 min	61%	334	1.85	Contains zinc phosphate Wet-on-wet capability Low HAPs

High Performance Zinc Primers

TYPE	PRODUCT	CORROSION RESISTANCE	DRY TO TOPCOAT	SBV	VOC (G/L)	HAP'S (LBS/SOL GAL)	PRIMARY FEATURES
Zincs							
Carbozinc	9 WB	Very good	18 hrs	62%	0	0	Preconstruction primer Water-based; inorganic 81% zinc
	8703	Very good	16 hrs	29%	696	4.13	Preconstruction primer Automated airless spray Solvent-based; inorganic 85% zinc
	11 FC	Outstanding	4 hours	62%	479	0.18	85% inorganic zinc Fast topcoat
	808	Excellent	90 min	61%	259	0.01	60% zinc-epoxy Low VOC/low HAPs
	8701	Excellent	5-10 min	64%	334	1.74	75% zinc-epoxy Fast topcoat times
	859	Outstanding	30 min	66%	326	3.16	81% zinc-epoxy

Finishes

TYPE	PRODUCT	COLOR/GLOSS RETENTION	DRY TO HANDLE	SBV	VOC (G/L)	HAP'S (LBS/SOL GAL)	PRIMARY FEATURES
Alkyds							
Carbocoat	140	Fair	1 hour	52%	420	5.00	High-gloss Fast dry
	8259 WR	Fair	30 min	32%	327	0.18	High-gloss Water-reducible
	8215	Good	2 hrs	52%	418	2.5	Semi-gloss Fast dry
	45	Good	7 hrs	50%	419	3.27	High-gloss
Polyurethanes							
Carbothane	134 HG	Outstanding	8 hrs	70%	264	1.65	Acrylic-urethane Economical
	8836 VOC	Outstanding	8 hrs	70%	190	1.27	High-gloss Acrylic-urethane Low VOC
	133 LH	Very Good	8 hrs	55%	324	0.51	Semi-gloss Polyester-urethane Good chemical resistance

Self-priming; Direct-to-Metal (DTM) Finishes*

TYPE	PRODUCT	CORROSION RESISTANCE	COLOR/GLOSS RETENTION	DRY TO HANDLE	SBV	HAP'S (LBS/SOL GAL)	PRIMARY FEATURES
Alkyds							
Carbocoat	8215	Good	Fair	2 hrs	52%	418	Semi-gloss Fast dry Zinc phosphate
	8215 VOC	Good	Fair	2 hrs	53%	336	Semi-gloss Fast dry Zinc phosphate Lower VOC
Epoxy							
Carboguard	8902 FC	Excellent	Poor	10 hrs	100%	0	Excellent barrier Chemical resistance
	635 VOC	Very Good	Poor	3 hours	65%	0.03	Fast cure Low-temp cure Moisture tolerant
Polyurethanes							
Carbothane	133 LV	Good	Very Good	8 hrs	72%	211	Satin/Semi-gloss Chemical resistance
	8812	Good	Excellent	6 hrs	54%	395	High-gloss Acrylic-urethane
	8815	Good	Excellent	2 hrs	54%	395	High-gloss Acrylic-urethane Fast cure
	8832	Good	Excellent	2 hrs	54%	336	High-gloss Acrylic-urethane Fast cure Lower VOC
	8845	Good	Outstanding	7 hrs	71%	228	High-gloss High DOI Low VOC
	8845 FC	Good	Outstanding	5 hrs	71%	228	High-gloss High DOI Low VOC Fast cure

*DTM finishes may also be used over a suitable primer to provide extended service life or augment adhesion to various substrates and surface preparation.

Specialties

TYPE/USE	PRODUCT	PRIMARY FEATURES
Highly chemical resistant coatings	**Plasite**	Ultra-high performance thin and thick film epoxies, modified epoxies, epoxy phenolics, high bake phenolics, trowelable linings, and vinyl esters.
Chemical resistant coatings	**Phenoline**	Highly functional thin and thick film epoxies for immersion in moderately corrosive services.
High-heat coatings	**Thermaline**	This series includes primers and finishes that can resist temperatures up to 1200°F (649°C).
Impact; abrasion resistant	**Reactamine**	This thick-film (25+ mils) series has extremely tough physical properties to withstand severe impact and abrasion.
Non-slip coating	**Carboguard**	Non-skid; non-sparking aggregates can be added (as needed) to epoxies providing non-slip properties
Surface tolerant coatings	**Carbomastic**	This series includes coatings that will tolerate wet surfaces, tight rust, and cure down to 20°F (-7°C); ideal for maintenance.
Thermal insulative coatings	**Carbotherm**	These products provide resistance to solar radiation and offer insulation properties for working spaces to protect from heat or condensation.
Ultra-weatherable finishes	**Carboxane**	The ultimate in long term color and gloss retention in an isocyanate-free finish.

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