

Rail

Coatings, Linings and Fireproofing



Proven Products from an Industry Leader

Carboline has been a leader in the industrial coatings and linings industry since 1947. Our comprehensive product line of premium Carboline brands such as Plasite®, Carboguard®, and Phenoline® provide solutions for a wide range of chemical exposures. These highly regarded product lines are well established in the rail industry, and provide the most inclusive interior and exterior systems in the market. Carboline's linings are tested in over 4,000 commodities and have the proven field history to provide the highest level of confidence to rail car owners and lessors.

Product Line

Carboline offers products for every segment of the rail industry from high performance coatings for exteriors of all types of rail cars, to interior linings for everything from food service to highly corrosive chemicals. Examples include:

- > Chemical resistant linings
- > Linings for highly corrosive commodities
- > Food-grade linings
- > Single-coat linings
- > Outstanding corrosion protection products
- > DTM exterior coatings
- > Two-coat exterior epoxy/urethane systems

Certifications / Listing

- > Det Norske Veritas
- > Underwriters Laboratories
- > National Sanitation Foundation
- > ISO 9001 Certified

Affiliations



Dedicated Service and Support

Our products are backed by the most experienced sales and service team in the industry, and our dedicated team of field representatives is focused solely on the rail transport market. In an ever evolving market, the Rail Group provides education, training, and technical support so that our specifiers, shippers, and applicators have the latest and best information upon which to make sound decisions.

Our services include

- > Coating and lining recommendations for hopper and tank cars
- > Lining testing services to verify resistance
- > Technical service and product training for application facilities
- > Field inspections and fleet evaluations
- > TruQC inspections
- > Access to TruQC quality and inspection software

The Carboline advantage

- > Training through Lunch & Learns, on-site training, and Rail Schools
- > Lining recommendations and testing services
- > Prejob meetings for project
- > Sample car inspections
- > Application training
- > Courtesy inspections
- > Coating failure analysis
- > Technical and sales support throughout North America



Another benefit of working with Carboline is the quality control documentation software, TruQC. This industry changing software offers real-time reporting eliminating the need for time consuming paperwork. It helps create a centralized database, telling the full life story of each and every asset. TruQC solves the documentation and management issues that owners face with one simple, integrated solution.

- > Syncs with Bluetooth enabled gauges
- > Numerous reporting options
- > Barcode scanning technology that imports product and batch data
- > Eliminates paperwork
- > Real-time data so everyone on your team sees the current information
- > Track projects and assets



Hopper cars, tank cars and other rolling stock

Carboline’s epoxy exterior coatings are designed for easy application and superior corrosion and chemical resistance. We offer a wide range of solutions that can provide fast cure times as well as VOC and HAP’s free coating systems. We are the leader in 100% solids technology and direct to metal (DTM) products.

Carboguard® 876

Carboguard 876 is a two component, 75% volume solids, modified amine cured epoxy formulated for corrosion resistance as a direct-to-metal (DTM) exterior coating for railcars.

Carboguard 876 HS

Carboguard 876 HS is a modified epoxy that is high solids, modified amine cured epoxy formulated for corrosion resistance as a direct-to-metal (DTM) exterior coating for railcars.

Carboguard 60 T

Carboguard 60 T is a ready-to-spray (pre-thinned) epoxy that is specially formulated for use as a single-coat, direct-to-metal (DTM) exterior coating with excellent corrosion protection. It easily flows into a smooth finish, has an easy 1:1 mix ratio and long pot life making it very shop-friendly.

Carboguard 904

Carboguard 904 is a 98% solids two component high gloss, fast-cure epoxy formulated for use as a direct-to-metal (DTM) exterior coating with excellent corrosion and chemical resistance.

Outstanding gloss and color retentive finishes

Our single-coat, single-pack finishes, and two-coat epoxy/urethane systems provide excellent corrosion resistance and UV resistance.

DTM Urethane

Carbothane® 8845

High gloss, high build, acrylic polyurethane coating which can be used as a single-coat, direct-to-metal (DTM) system. The coating has very friendly spray (flow and leveling) properties for an outstanding final appearance. This coating has excellent hardness, adhesion and resistance to: weathering, impact, marring, abrasion, chemicals and staining.

Acrylic Coatings

Carbocrylic 3358-G

High performance graphite reinforced direct-to-metal primer with excellent corrosion resistant properties, resistance to flash rusting and suitability for SPPC-SP3 and SP6-cleaned steel. Formulated specifically for chemical resistance to acids and chemicals.

Carbocrylic® 3359

A versatile high performance finish with excellent corrosion resistance and exterior weathering properties. This single component water-based acrylic has fast dry characteristics.

Carbocrylic 3359 DTM

A single-component durable, high performance direct-to-metal acrylic coating for use where excellent weathering properties and chemical resistance are required.

Two Coat Epoxy/Urethane Systems

Carboguard 8922

Carboguard 8922 is a versatile corrosion resistant epoxy primer. May be topcoated with a broad variety of high performance finish coats.

Carboguard 877

A high solids, high build rust inhibitive epoxy primer with excellent corrosion resistance for long-term protection of the exterior of railcars.

Carbothane 134 HG

Coupled with Carboguard 8922 or 877, this acrylic polyurethane completes a high performance exterior coating system with excellent chemical resistance and color and gloss retention.

Carbothane 133 HB

High build, low sheen finish that has excellent resistance to corrosion, chemicals and abrasion. Suitable for application over a number of Carboline primers and intermediates, this material provides very good weathering performance in a broad range of colors.



Linings for hopper cars

Carboline’s hopper car coatings are one and two coat systems that provide proven protection. We offer fast cure, FDA compliant systems with little to no odor, that are tough, flexible, abrasion and impact resistant. Our product offering includes the widest variety of chemical resistant coatings in the rail industry.

Carboguard 892

A high solids, semi-gloss, high build, self-priming, epoxy that provides a tough, cleanable and aesthetically pleasing surface. It is suitable for carrying dry food-grade cargoes.

Carboguard 896

A two component, high solids, modified Bis-F epoxy formulated for use as a protective lining with excellent resistance to acetic and hydrochloric acids and suitable for cars carrying EVA, PTA, PE, PP, PS, and PVC plastics.

Carboguard 992

A solventless, epoxy lining for dry bulk cargoes that is applied by heated, airless plural component spray, as a one coat lining for hopper cars carrying plastic pellets, food and grain, or other dry cargoes. It has exceptional chemical resistance and is acceptable for direct contact with dry bulk food products.

Carboguard 995

A two component, solventless epoxy formulated as a flexible, direct-to-metal (DTM) protective lining for rail cars. Used for dry bulk service for hopper cars carrying polyethylene (PE), polypropylene (PP), or polystyrene (PS) plastic pellets.

Reactamine® Series

A 100% solids elastomeric, polyurethane and polyurea hybrid system applied at a nominal thickness of 18 to 125 mils, depending on conditions of use. The high build coating provides a durable, flexible membrane that can withstand significant impact and abrasion. Extremely rapid cure improves throughput in the shop and allows quick return to service for field repairs. Reactamine can be used in fertilizer, salt, adipic acid and plastic pellet services.

Tank car linings to handle acids, caustics, solvents, crude oil or food-grade cargoes

Carboline’s tank car linings are the most complete product offering in the industry, with a long proven history of performance, a wide variety of chemical resistance options, FDA compliant, with little or no odor. Our offering also includes tough resilient systems that provide abrasion and impact resistance and come in one or multiple coat systems with fast cure times.

Carboguard 891 R

A self-priming, high solids, high build epoxy for use in areas requiring formula compliance for direct and indirect contact with food. May be used as a two or three coat system for lining tanks and other equipment for storage of liquid sugar cargoes.

Carboguard 571 & 4571

Solvent-free, plural component-applied coating commonly used for tank lining applications in the rail industry (corn syrup cars) and other in-shop applications where single-coat and taste/odor restrictions are primary requirements.

Phenoline® 333

A low bake, high solids, modified epoxy formulated for use as a protective lining with excellent resistance to molten sulfur. Excellent chemical and thermal shock resistance.

Phenoline 375 T

A two component, high solids, modified epoxy formulated for use as a multi-service, protective lining with excellent overall chemical resistance.

Plasite® 3070, 3070 L, 3073

High-bake coatings using an unmodified phenolic resin with superior resistance to acids and solvents. Conforms to current VOC regulations.

Plasite 4100 & 4300

Thick film vinyl esters with extreme chemical resistance.

Plasite 4550 S, 4555 S

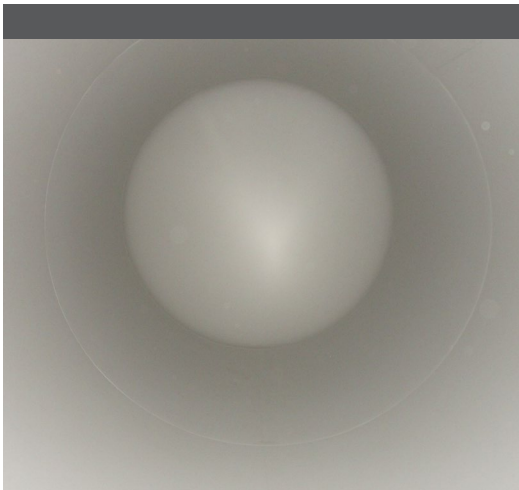
Thick-film, single-coat, epoxy-novolac linings with outstanding overall chemical resistance to acids, caustics, solvents, crude oil. Plasite 4555 S handles food-grade service.

Plasite 7133 HS

Excellent resistance to a wide range of chemicals, water and aqueous food solutions. Used where taste/odor restrictions to sugar solutions, wine, beer, meat products and similar cargoes are needed.

Plasite 9570, 9571, 9573

Specifically formulated for excellent abrasion resistance while retaining performance and physical properties. These are high-solids, low bake linings with outstanding overall chemical resistance (especially caustics).



GLOBAL COATINGS LEADERS™

RIGHT PEOPLE • RIGHT PRODUCTS • RIGHT LOCATIONS



GLOBAL MANUFACTURING PLANTS

CARBOLINE COMPANY
GLOBAL HEADQUARTERS
2150 SCHUETZ ROAD
ST. LOUIS, MO 63146 USA
PH: +1-314-644-1000
WWW.CARBOLINE.COM

ARGENTINA – BUENOS AIRES
EINSTEIN 1095
PARQUE INDUSTRIAL OKS
GARÍN PROV. DE BUENOS
AIRES, ARGENTINA
PHONE: 54-3327-44-2222
FAX: 54-3327-44-2223

AUSTRALIA – BRISBANE
7 PRODUCTION AVE
ERNEST JUNCTION
QUEENSLAND 4214
AUSTRALIA
PHONE: +61 7 3287 0222
FAX: +61 7 5594 9093

**BRAZIL – JARDIM CAMPO
GRANDE**
CNPJ: 58.681.867/0001-30
RODOVIA VITO ARDITO, 6401
KM 118.5, JARDIM CAMPO
GRANDE
12282-535 CACAPAVA SP
BRAZIL

CANADA – ONTARIO
420 TAPSCOTT ROAD UNIT 5
SCARBOROUGH, ONTARIO
M1B 1Y4, CANADA
PHONE: 416-292-2361
FAX: 416-298-5887

CHINA – DALIAN
HOU SHI CUN, DA WEI JIA
ZHEN
JIN ZHOU DISTRICT
DALIAN, CHINA 116110
PHONE: 86-411-8789-8441,
8442, 8443, 8444
FAX: 86-411-8789-8445

INDIA – CHENNAI
NO. 356 & 357 SIDCO
INDUSTRIAL ESTATE
AMBATTUR,
CHENNAI 600 098
INDIA
PHONE: 91-22-28500321
FAX: 91-22-28500323

INDIA – MAHARASHTRA
GUT NO. 300
VILLAGE MUSSARNE
BHIWANDI WADA ROAD,
TALUKA WADA,
DISTRICT PALGHAR,
MAHARASHTRA
INDIA

ITALY – ALGHERO
VIA MILANO 150
20093 COLOGNO MONZESE
(MI), ITALY
PHONE: 3902-25 3751
FAX: 3902-25 37560

JAPAN – AMAGASAKI
TERAMOTO UNYU SOKO CO.,
LTD 17
MINAMIHATSUSHIMA-CHO,
AMAGASAKI, 660-0833 JAPAN
PHONE: 81-3-3643-4501
FAX: 81-3-3643-2951

MALAYSIA – KUALA LUMPUR
LOT 37631-37632 JALAN 6/37A
TAMAN BUKIT MALURI
INDUSTRIAL AREA
KEPONG 52100,
KUALA LUMPUR, MALAYSIA
PHONE: 603-6277-9575
FAX: 603-6277-4645

NEW ZEALAND – TAURANGA
91-111 OROPI ROAD
GREERTON
TAURANGA
NEW ZEALAND
PHONE: +64 7 5411 221
FAX: +64 7 541 1310

NORWAY – LIERSTRANDA
P.O. BOX 593
3412 LIERSTRANDA, NORWAY
PHONE: 47-32-857300
FAX: 47-32-857301

PUERTO RICO – SAN LORENZO
URB. APONTE #5
SAN LORENZO, PUERTO RICO
00754
PHONE: 787-736-4221
FAX: 787-736-53133

SAUDI ARABIA – DAMMAM
1ST INDUSTRY CITY, 28TH
STREET
P.O. BOX 1050
DAMMAM 31431,
KINGDOM OF SAUDI ARABIA
PHONE: +966 3 847 3044
FAX: +966 3 847 3689

SPAIN – VALLIRANA
PERLITA Y VERMICULITA SL
VAT NO. ESB58598418
POLIGONO INDUSTRIAL CAN
PRUNERA S/N
VALLIRANA 08759
SPAIN

**SOUTH AFRICA –
JOHANNESBURG**
8 CRESSET ROAD
MIDRAND INDUSTRIAL PARK
JOHANNESBURG,
SOUTH AFRICA
PHONE: 27-11-2545500
FAX: 27-11-310-2872

SOUTH KOREA – BUSAN
43-1, JINYOUNG-RI
JINYOUNG-EUB
KIMHAE-CITY, 621-800
KYOUNGSANGNAMDO, KOREA
PHONE: 82-55-343-6441/5
FAX: 82-55-343-6414

TURKEY – BURSA
ALI OSMAN SONMES CAD.
NO:4
BURSA, DOSAB 16369 TURKEY
PHONE: 90-224-261-0537

UAE – DUBAI
P.O. BOX 3034
DUBAI, UAE
PHONE: 971-4-347-0460
FAX: 971-4-347-0242

USA – DAYTON
95 AIRPARK VISTA BLVD.
DAYTON, NV 89403
PHONE: 775-246-0760
FAX: 775-246-0763

USA – GREEN BAY
614 ELIZABETH ST
GREEN BAY, WI 54302
PHONE: 920-437-6561
FAX: 920-437-8546

USA – LAKE CHARLES
900 OPELOUSAS STREET
LAKE CHARLES, LA 70601
PHONE: 337-433-0605
FAX: 337-439-0380

USA – LOUISA
321 DUKE ST.
LOUISA VA 23093
PHONE: 540-967-5119
FAX: 540-967-5120

VENEZUELA – VALENCIA
URBANIZACION INDUSTRIAL
"EL TIGRE"
AVENIDA PRINCIPAL
GALPÓN "H"
VALENCIA EDO. CARABOBO
VENEZUELA
PHONE: 58-245-4000400
FAX: 58-245-5642011

VIETNAM – TINH BINH DUONG
LO D, 4R-CN,
KHU CONG NGHIEP MY PHUOC 3
THI XA BEN CAT
TINH BINH DUONG
VIETNAM

