



MILITARY SOLUTIONS

Brilliance Beyond The Surface.



Military Powder Coatings



“SUNDIAL is committed to the research and development of chemical agent resistive coatings or CARC coatings to support our U.S. military troops.”

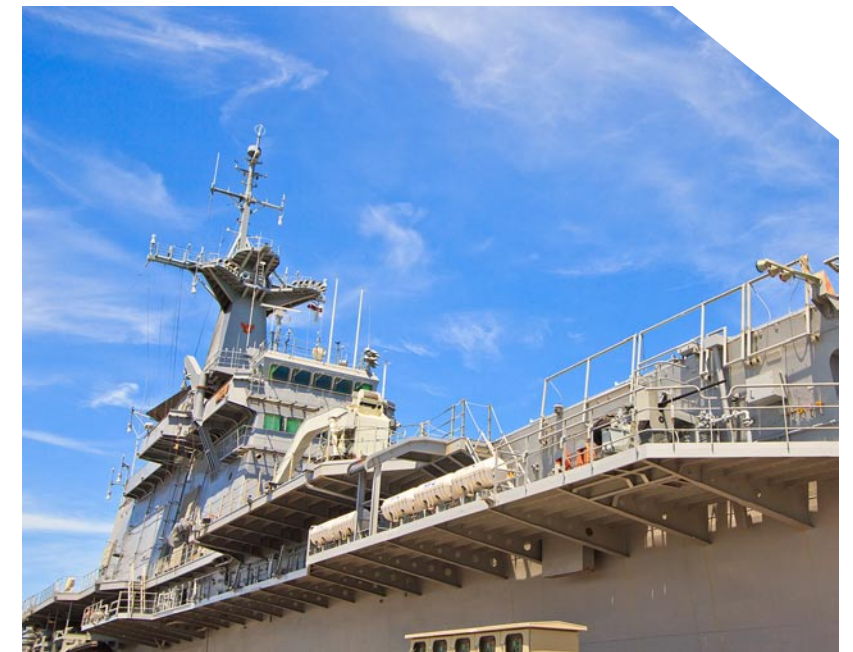
— Shivie Dhillon, SunDial Powder Coatings

CARC Coatings

CHEMICAL AGENT RESISTIVE COATINGS

SUNDIAL is committed to the research and development of chemical agent resistive or CARC powder coatings to support the U.S. military. These coatings must resist chemical warfare agents, meet color and IR requirements, and impart low gloss and low sheen spectrally while withstanding UV degradation in both outdoor and accelerated chamber evaluations. They must also resist chemical solutions used in the field to decontaminate exposed equipment. CARC applications include:

- Military vehicles
- Fixed-wing aircraft
- Helicopters
- Missile launchers
- Ground support
- Water purification units
- Communication vans
- Forklifts



Rescue helicopter, left. Navy aircraft carrier, above.



CARC Specification

CARC POWDER COAT REQUIREMENTS

THE U.S. DEPARTMENT OF DEFENSE issued specifications for CARC coatings in 2010 allowing powder coaters to finish military vehicles and equipment that before were restricted to the use of liquid paint only. The U.S. Army Research Laboratory (ARL) released the specs—MIL-PRF-32348—for powder coating finishes after the U.S. Environmental Protection Agency, urged they use coatings free of volatile organic compounds (VOCs), volatile organic hazardous air pollutants (VOHAPs) and also inorganic hazardous air pollutants (HAPs). Approved CARC coatings must provide chemical resistance, low luster, zero infrared detection and a durable exterior.

PRIMER AND TOPCOAT CATEGORIES FOR CARC POWDER COATING

- TYPE 1 COATING — EPOXY BASED CARC PRIMER
- TYPE 2 COATING — EPOXY BASED CARC PRIMER (for interior components)
- TYPE 3 COATING — CAMOUFLAGED CARC TOP COATINGS
 - REQUIRED COLORS:
 - 383 GREEN, 686 TAN, A/C GREEN, BLACK & BROWN
- TYPE 4 COATING — SPECIAL CARC COATINGS FOR MUNITION CONTAINERS

SUNDIAL can provide a powder-coated CARC finish that meets all of these key environmental, appearance and performance requirements.



“CARC powder coating offers the U.S. military a more efficient, cost-effective and environmentally responsible alternative to liquid paint CARC coatings.”

— Shivie Dhillon, SunDial Powder Coatings



CARC Benefits

CARC POWDER COATING BENEFITS

Approved CARC powder coats will resist absorption of chemical warfare agents, and make it easier and safer to decontaminate exposed vehicles and equipment in the field. CARC powder coatings offer a lusterless finish (below 1.5 gloss units), with zero infrared detection and superior exterior surface durability. In summary, CARC powder coated surfaces offer numerous benefits for OEMs and our military:

- chemical agent resistive
- lusterless, low gloss surfaces
- reduced VOCs
- improved troop safety
- resists decontaminating solvents
- UV durable with zero IR detection
- reduced hazardous air pollutants
- cost savings over liquid paint CARCs



Supplies being loaded with military forklift, left. Navy F-18 on flight deck above.





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