PRODUCT BULLETIN

March 2026

# ARMORCOTE® 966 Series

## Metallic Gel Coats

## DESCRIPTION

ARMORCOTE® 966 Series metallic gel coats are used in passenger, camper, utility, and recreation vehicles, decorative structural components, and for marine vehicle surfaces above the water line (not recommended for water immersion service). ARMORCOTE® 966 Series is Polynt's best system for weathering resistance in a metallic gel coat

ARMORCOTE® 966 Series meets the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) for both Marine Manufacturing and Reinforced Composites Production.

## BENEFITS & FEATURES

- Versatile uses for many applications processes
- Excellent weather resistance
- Visually appealing finishes for premium grade vehicles and surfaces
- Capable of meeting HAP requirements for marine and other industries

## PROPERTIES – LIQUID

| Property(1) | Unit | 966 Series |
|---|---|---|
| Viscosity(2) | cps | 15,000 |
| Thix Index(3) | - | 6.5 |
| Gel Time(4) | minutes | 12.5 |
| Lay-up Time | minutes | 67.5 |
| Sag Resistance | - | Good @ 24 mils wet |
| Hide | - | Normally complete @ 10 mils |
| Weight per Gallon | lbs/gal | 10.0 |

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RV Spindle #4 at 4 RPM
3) Brookfield Viscometer RV Spindle #4 at 2/20 RPM
4) 1.80% Arkema Luperox® DDM-9

## APPLICATION

Metallic gel coats are formulated for spray applications. Brushing or rolling is not recommended.

Flakes of aluminum, bronze, coated mica, copper, glass, iron oxide, and thermoplastic or thermoset plastic are used to impart metallic effects. Type, size, concentration, orientation, transparency and opacity of the flakes, along with the presence of dyes or pigments, contribute to the overall color and appearance of metallic gel coats.

Changes in the setup of the spraying equipment and/or application technique leads to different metallic color shades and patterns. To reproduce the metallic color, it is essential that the following be kept constant: spray equipment, pot pressure, atomization pressure, and distance at which the spraying is done.

If the patterns of the metallic gel coat on the finished part are not satisfactory, a dust coat approach could be used. The dust coat should be *consistent and uniform*. A heavy dust will yield a different effect than a light dust. If the gel coat is sprayed to an extremely inconsistent dust coat, the different effects will be noticeable. A three-to-four-minute interval should be allowed before the final spray is applied to achieve the desired film thickness.

For best overall performance properties, a wet film thickness of 18 ± 2 mils is recommended as ideal. Films less than 12 mils may not cure properly, may be hard to patch, have more print-through, and be more susceptible to water blisters. Films above 24 mils may pre-release, trap porosity, crack and are more subject to weathering discoloration. If weathering (yellowing from sunlight, decks) is of great concern, thinner films (12 to 16 mils) would perform better, but patchability, print-through and blister resistance could suffer.

Patching metallic gel coats is very difficult and patches will likely be more noticeable than those for solid colors. Fabricators may have to be content with some color and appearance differences between the patch and surrounding area, due to the sanding/polishing disturbance of the metallic pigments.

Refer to Polynt's Composites Applications Guide ("Cookbook") for equipment and application recommendations. Each user must determine the suitability of this product to his/her particular mode of operation and intended end-use application. A Polynt representative will be available to assist in the proper selection of all Polynt products available for commercial use.

## CURE

It is recommended that gel time be checked in the customer's plant because age, temperature, humidity and initiator will produce varied gel times. All data referencing gel or cure refers specifically to Arkema Luperox® DDM-9 initiator. United Initiators Norox® MEKP-9 and Norox® MEKP-9H, Nouryon Cadox® L-50a and Cadox® D-50 are expected to yield similar performance. Arkema Luperox® DHD-9, United Initiators Norox® MEKP-925, and Norox® MEKP-925H may yield slightly shorter gel and cure times.

The initiator level should not exceed 3.0% or fall below 1.2% for proper cure. Recommended range is 1.2% to 3.0% with 1.8% at 77 °F being ideal. Normally, the gel coat film is ready for lamination in 45 to 90 minutes. This time element is dependent on material temperature, room temperature, humidity, air movement, and initiator concentration. Special fast-cure versions are available but must be requested. These products offer lay-up times of 30 minutes or less depending on gel times. Fast cure products have shorter stability and should not be inventoried more than 45 days.

These products (standard or fast cure) should not be used when temperature conditions are below 60 °F, as curing may be adversely affected.

## PRECAUTION

Metallic gel coats may contain aluminum pigments. Precautions of aluminum pigment-containing products must be exercised. Wearing gloves is recommended when working with these products. Small spills and drops should be cleaned immediately before the concentrate contaminates and spreads in the working area. All equipment should be well grounded. Chlorinated solvents in contact with aluminum can cause an explosion; refrain from cleaning the metallic spray equipment with such solvents.

## EXPOSURE PERFORMANCE

Metallic gel coats expose similarly to conventional solid gel coat colors. Chalk development and gloss loss will vary with the metallic content. High metallic content gel coats may demonstrate more rapid chalk development than others. Ask a Polynt Representative about specific formulations.

## CAUTION

ARMORCOTE® 966 gel coats will not correspond in color to gel coats in Polynt's other series with similar codes. For example, ARMORCOTE® 966 series metallic gel coats will not be the same color as Polycor® 944 Series or Polycor® 943 Series. This is due to the variety of metallic effects that can be used in any specific color.

Metallic gel coats are not compatible in the liquid state with isophthalic or ISO/NPG gel coats or resins. Spray and pumping equipment must be completely clean of these gel coats or resins before metallics can be used.

Do not add any material, other than recommended methyl ethyl ketone peroxide to these products without the advice of a representative of the Polynt.

## SHELF LIFE & STORAGE

The shelf life of ARMORCOTE® 966 Series is 60 days from the date of manufacture from Polynt. Shelf life of ARMORCOTE® 966 Metallic Gel Coats depends on the type of metallic pigment used. To maximize usage life and maintain optimum properties, resins and gel coats should be stored in the original closed container at temperatures below 23°C/73°F and away from ignition sources and sunlight. Keep containers sealed to prevent moisture pick-up and monomer loss.

## RELATED PRODUCTS

Polynt recommends the use of PATCHAID® when patching ARMORCOTE® 966 gel coats. Please see the technical data sheets for Polynt's PATCHAID® 970XJ037, 970X900, and 970XA014 products.

## SAFETY & WARRANTY

To receive a copy of our safety and warranty information, please email safetyandwarranty@polynt.com.