

AMERCOAT® 741

DESCRIPTION

High Temperature Silicate Topcoat

PRINCIPAL CHARACTERISTICS

- Outstanding solvent, temperature, and radiation resistance
- Resistant to dry temperature up to 1000°F(538°C)
- No force cure required
- High solids, VOC compliant

COLOR AND GLOSS LEVEL

- Pearl gray
- Flat

Note: Color is approximate and will be subject to some degree of drift over time

BASIC DATA AT 68°F (20°C)

Data for product	
Number of components	One
Volume solids	63 ± 2%
VOC (Supplied)	max. 3.1 lb/US gal (approx. 371 g/l)
Recommended dry film thickness	2.0 - 5.0 mils (50 - 126 µm) depending on system
Theoretical spreading rate	505 ft ² /US gal for 2.0 mils (12.6 m ² /l for 50 µm)
Shelf life	At least 12 months when stored cool and dry

Notes:

- See ADDITIONAL DATA - Overcoating intervals
- See ADDITIONAL DATA - Curing time



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TEMPERATURE RESISTANCE

Temperature resistance		
First coat	Second coat	Temperature resistance
DIMETCOTE 9-series (2.5 - 4.0 mils)	AMERCOAT 741 (3.0 - 5.0 mils)	500°F (260°C)
DIMETCOTE 9-series (2.0 - 3.0 mils)	AMERCOAT 741 (3.0 - 4.0 mils)	750°F (400°C)
DIMETCOTE 9-series (2.0 - 3.0 mils)	AMERCOAT 741 (2.0 - 3.0 mils)	1000°F (540°C)

Notes:

- Total system dry film thickness must not exceed 6 mils for service over 750°F
- Consult PPG technical service for approvals to higher temperatures for specific conditions.

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Steel

- Remove weld spatter, protrusions, and laminations in steel. Grind welds smooth in accordance with NACE RP-0178
- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
- Abrasive blast with an angular abrasive to an SSPC SP-10 cleanliness or higher. Achieve a surface profile of 1.0 – 2.5 mils (25 – 64 µm)
- Apply DIMETCOTE 9-series primer as soon as possible to avoid rusting of blasted surfaces

Stainless steel

- Not recommended

Inorganic zinc surfaces

- Surface must be clean, dry and free of zinc salts

Substrate temperature and application conditions

- Surface temperature during application should be between 20°F (-7°C) and 130°F (54°C)
- Surface temperature during application should be at least 5°F (3°C) above dew point
- Ambient temperature during application and curing should be between 20°F (-7°C) and 100°F (38°C)
- Relative humidity during application should be above 40% and below 80%

INSTRUCTIONS FOR USE

- Mix with a pneumatic air mixing at moderate speeds to homogenize the container
- Agitate continuously during application



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Application

- Area should be sheltered from airborne particulates and pollutants
- Provide shelter to prevent wind from affecting spray patterns

Material temperature

Material temperature during application should be between 40°F (4°C) and 90°F (32°C)

Air spray

- An agitated pressure pot is recommended
- Separate air and fluid regulators are essential
- Ensure there is a moisture and oil trap in the main air line

Recommended thinner

THINNER 21-06 (AMERCOAT 65) or THINNER 21-25 (AMERCOAT 101) (to reduce dry spray))

Volume of thinner

0 - 5%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Nozzle pressure

Atomizing pressure 30 - 40 p.s.i. (2.0 - 3.0 bar); Fluid pressure as required

Brush/roller

- Use a high quality natural bristle brush. Ensure brush is well loaded to avoid air entrainment. Brush application is limited to small touch up areas of a few square inches
- Roller application is not recommended for service temperatures exceeding 500°F
- Use a well-loaded, solvent resistant, short nap roller

Recommended thinner

AMERCOAT 65 or AMERCOAT 101 (to reduce dry spray)

Volume of thinner

0 - 5%

Cleaning solvent

AMERCOAT 12 CLEANER or AMERCOAT 65 THINNER (xylene)



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ADDITIONAL DATA

Overcoating interval for DFT up to 3.0 mils (75 µm)					
Overcoating with...	Interval	40°F (4°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	36 hours	24 hours	12 hours	8 hours
	Maximum	Extended	Extended	Extended	Extended

Note: *Recoatable when clean and dry. Remove any dry spray and solvent wipe the surface. Lightly abrade if the surface appears to be glazed and smooth. Apply a second coat thinned with Amercoat 101 thinner. Do not exceed recommended film thickness based on the temperature.

Full cure time at 3 mils dft and minimum 50% relative humidity	
Substrate temperature	Full cure
40°F (4°C)	7 days
50°F (10°C)	5 days
70°F (21°C)	48 hours
90°F (32°C)	24 hours

Note: Amercoat 741 is a tough film at ambient, and continues to increase & maintains hardness with time & temperature.

Curing time for DFT up to 3.0 mils and 50% relative humidity			
Substrate temperature	Dry to handle	High temperature service	Light impact/abrasion
40°F (4°C)	36 hours	4 days	4 days
50°F (10°C)	24 hours	48 hours	48 hours
70°F (21°C)	12 hours	36 hours	36 hours
90°F (32°C)	8 hours	24 hours	24 hours

Note: Amercoat 741 is a tough film at ambient, and continues to increase & maintains hardness with time & temperature.

SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.



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REFERENCES

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431

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Packaging: Available in 1 and 5 gallon containers

Product code	Description
AT741-23	Pearl Gray

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