

AMERCOAT® ONE

DESCRIPTION

One-component, multi-purpose epoxy

PRINCIPAL CHARACTERISTICS

- Unique epoxy formulation
- Single pack for ease of use
- Durable epoxy performance
- Direct-to-metal formulation
- VOC Compliant <2.8 lb/ gal
- Accepts a broad range of topcoats

COLOR AND GLOSS LEVEL

- Red, White, Black, Gray
- Low gloss

Note: Epoxy coatings will characteristically chalk and fade upon exposure to sunlight. Light colors are prone to ambering to some extent in interior or exterior exposures

BASIC DATA AT 68°F (20°C)

Data for product	
Number of components	One
Volume solids	63 ± 2%
VOC (Supplied)	max. 2.6 lb/US gal (approx. 309 g/l)
Recommended dry film thickness	4.0 - 6.0 mils (100 - 150 µm) depending on system
Theoretical spreading rate	253 ft ² /US gal for 4.0 mils (6.3 m ² /l for 100 µm)
Shelf life	At least 12 months when stored cool and dry

Notes:

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

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Coating performance is, in general, proportional to the degree of surface preparation



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Steel

- Remove all rust, dirt, moisture, grease or other contaminants from the surface
 - Power tool clean in accordance with SSPC SP-3 or hand tool clean to SSPC SP-2 requirements. Alternately, abrasive blast to SSPC SP-7 requirements. Abrasive blasting to SSPC SP-6 or better is also allowable and will give the best possible system performance
 - Achieve a surface profile of 1.5 – 3.5 mils (38 – 89 µm)
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Non-ferrous metals

- Remove all rust, dirt, moisture, grease or other contaminants from the surface
 - Treat with conversion coatings or phosphatizing agents. Applicable over surface treatments such as MIL-C-5541. Alternately, lightly abrasive blast with fine abrasive to produce a uniform and dense anchor profile of 1.0 – 3.0 mils (25 – 75 µm) in accordance with SSPC SP-16.
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Galvanized steel

- Remove oil or soap film with detergent or emulsion cleaner, then use a phosphatizing conversion coating
 - Alternately, brush blast in accordance with SSPC SP-16 guidelines
 - Galvanized surfaces that have been passivated with a chromate treatment must be abrasive blasted. Coatings may not adhere to chromate sealed galvanizing if the chromates are not completely removed.
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Concrete

- Prepare in accordance with SSPC SP-13 guidelines
 - Remove all surface contaminants such as oil, grease, and embedded chemicals
 - Abrade the surface per ASTM D4259 to remove all chalk and surface glaze or laitance
 - Mechanical surface preparation should expose sub-surface voids and provide a surface profile equivalent to 60 grit sandpaper or coarser
 - Test for moisture by conducting a plastic sheet test in accordance with ASTM D4263
 - Surface should be free from moisture in accordance with ASTM D4263. Refer to Information Sheet # 1496ACUS for further details regarding moisture measurements
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Atmospheric exposure conditions

- Ambient temperature during application and curing should be between 50 °F (10 °C) and 100 °F (38 °C)
 - Material temperature should be between 50 °F (10 °C) and 90 °F (32 °C)
 - Relative humidity during application and curing should be between 50% and 90%
 - Curing rate will decrease significantly under 50% relative humidity
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Substrate temperature

- Surface temperature during application should be between 50°F (10°C) and 120°F (49°C)
 - Surface temperature during application should be at least 5°F (3°C) above dew point
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SYSTEM SPECIFICATION

- Primers: Direct to substrate, AMERCOAT 68HS, DIMECOTE-series application over aged coatings that are cleaned and abraded
- Topcoats: AMERCOAT 450-series polyurethanes, AMERSHIELD, PSX 700, AMERCOAT 229T, PSX One, SIGMADUR polyurethanes, PITHANE polyurethanes

Note: A test patch is recommended

INSTRUCTIONS FOR USE

- Agitate with a power mixer for 1 – 2 minutes until completely dispersed. Ensure good off-bottom mixing

Application

- Area should be sheltered from airborne particulates and pollutants
- Ensure good ventilation during application and curing
- Provide shelter to prevent wind from affecting spray patterns
- Avoid combustion gases or other sources of carbon dioxide that may promote amine blush and ambering of light colors

Material temperature

Material temperature during application should be between 50°F (10°C) and 90°F (32°C)

Air spray

- Use standard conventional equipment
- Separate air and fluid pressure regulators and a moisture and oil trap in the main air supply line are recommended.

Recommended thinner

THINNER 21-06 (AMERCOAT 65) (xylene)), THINNER 21-25 (AMERCOAT 101) (recommended for > 90°F (32°C))

Volume of thinner

0 - 15%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Airless spray

- 45:1 pump or larger

Recommended thinner

THINNER 21-06 (AMERCOAT 65) (xylene)), THINNER 21-25 (AMERCOAT 101) (recommended for > 90°F (32°C))

Volume of thinner

0 - 5%, depending on required thickness and application conditions

Nozzle orifice

0.015 – 0.017 in (approx. 0.38 – 0.43 mm)



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Brush/roller

- Use a high quality natural bristle brush and/or solvent resistant, 1/4" nap roller. Ensure brush/roller is well loaded to avoid air entrainment. Multiple coats may be necessary to achieve adequate film-build

Recommended thinner

Thinner 21-06 (Amercoat 65, 97-727, xylene) or Thinner 21-25 (Amercoat 101) for temperatures > 90 F.

Volume of thinner

0 – 5%

Cleaning solvent

AMERCOAT 12 CLEANER or AMERCOAT 65 THINNER (xylene)

ADDITIONAL DATA

Overcoating interval for DFT up to 6.0 mils (150 µm)				
Overcoating with...	Interval	50°F (10°C)	70°F (21°C)	90°F (32°C)
Itself and recommended topcoats	Minimum	16 hours	8 hours	4 hours
	Maximum	21 days	14 days	7 days

Note: Dry times are dependent on air and surface temperatures as well as film thickness, ventilation, and relative humidity. Maximum recoating time is highly dependent upon actual surface temperatures – not simply air temperatures. Surface temperatures should be monitored, especially with sun-exposed or otherwise heated surfaces. Higher surface temperatures shorten the maximum recoat window

Curing time for up to 4.0 mils and 50% minimum relative humidity		
Substrate temperature	Dry to touch	Dry to handle
50°F (10°C)	2 hours	16 hours
70°F (21°C)	1 hour	8 hours
90°F (32°C)	30 minutes	4 hours

SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets

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
ATONE2	Gray
ATONE3	White
ATONE72	Red
ATONE9	Black

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