

Technical Data Sheet

AMERCOAT D9

JUNE 1999

Inorganic Zinc Primer

Product Data

Self curing, inorganic zinc primer. The coating consists of a basic zinc silicate complex. Liquid base and zinc filler are mixed prior to application.

General Data

Weathering Excellent Finish Matt

Chemical Resistance Good. Consult Ameron

Coatings for specific information. Resistant to most solvents. Not resistant to acids

or alkalis.

Abrasion Resistance Good. Increases with age.

AS1511 Coefficient of friction 0.477 (75-130µm films).

Temperature Range Up to 400°C (dry heat).

Colour Metallic Grey.

Topcoating Epoxy, polyurethane,

chlorinated rubber, vinyl and

acrylic.

Shelf Life 9 months if stored in sealed

containers away from heat or

moisture.

Uses and Properties

An inorganic zinc base coating that protects steel galvanically, eliminating sub film corrosion. Will not undercut if coating is scored. Has outstanding application properties and can be applied at the recommended film thickness in one coat.

Ameron D9 is used as a single coat protection of steel structures in weathering exposure and as a base coat for organic and inorganic topcoats in more aggressive environments. Suitable for internal and external coating of storage tanks containing fuels and organic solvents. It has many uses as a maintenance primer, with or without topcoats, depending on exposure. Used widely in chemical plants, paper mills, refineries and coastal or salt atmospheres including offshore structures.

Note – Not recommended for direct exposure to acids or alkalis without a suitable topcoat.

Typical Applications

Steel industry, paper industry, shipping industry, oil industry, chemical industry, rolling stock, food and beverage industry, marine and industrial environment, mining industry.

APAS Approval

Approved to GPC-C-29/8A. When overcoated with other APAS approved products approved to GPC-C-29/7A, 7F & 7P and GPC-C-11/A

Typical Systems

Steel Atmospheric Service²

Class 2 $\frac{1}{2}$ blast cleaning according to AS1627.4 for long term life in mild environment or medium life in severe environment – 1st coat Amercoat D9 – DFT 70-85 μ m.

For long life in severe environments, Class 2 $\frac{1}{2}$ blast cleaning – 1st coat Amercoat D9 70 - 85 microns, 2nd coat Amerlock 400 DFT 150 – 200 microns, 3rd coat Amercoat 450HD, or two coat system:

1st coat Amercoat D9 DFT 70 – 85 microns 2nd coat PSX-700 DFT 100 – 150 microns

Weld Through Prefabrication

Class 2 $\frac{1}{2}$ blast cleaning. As a weld through pre-fab or shop primer – Amercoat D9 – DFT 20-25 μ m⁴.

- Rust grades C or D of AS1627.9 cannot be satisfactorily blast cleaned.
- This phrase and the terms relating to "life" and "environment" are as defined in AS2312 "Protection of Iron & Steel Against Atmospheric Corrosion".
- ³ Alternative epoxy coatings may be suitable.
- DFT in excess of 25µm not only increases resistance in electric welding circuit but increases amount of "zinc fume" arising.
- Alternative topcoats may be suitable depending on exposure environment.

Application Instructions

Adhere to all application instructions, precautions, conditions and limitations during storage, handling, application and drying periods to obtain the maximum performance. For conditions outside the requirements or limitations described contact your PPG Industrial Coatings representative.

Application Equipment

Conventional spray application – Use pressure fed spray gun – De Vilbiss JGB502, E fluid tip, 704 air cap set up, or equivalent with 500 kPa atomising pressure and air agitated pot pressure of 150 kPa according to length of material line used

Airless spray application – Use Binks model 505 gun, Hawk 4B pump or equivalent. Use a 0.021-0.029" (0.533-0.736) tip with a 14-21 MPa atomising pressure. Suitable for brush and roller onto small areas only.

Application Data

Theoretical coverage

7.8 sq. metres per litre at 75µm DFT. Material losses during mixing and application will vary and must be considered when estimating requirements.

Solids

Equivalent to 58% by volume (theoretical). Zinc in dry film 85% by weight.

Drying time (@ 25°C)

Surface dry 10-15 minutes. Recoat after 48 hours. Will cure at temperatures down to -5° C. Where humidity is low, it may be necessary to promote curing by applying a light intermittent water spray to the coated surface after allowing to dry for 1 hour @ 25°C.

Pot Life (@ 25°C)

6-8 hours, (50% R.H.). Less at higher temperatures.

Note: The figures quoted for pot life and drying/curing times are dependent on site conditions such as ambient and steel temperatures, weather and ventilation.

Mixing

Mix as supplied slowly sifting zinc filler into liquid base with continuous mechanical agitation. Mix until free of lumps. Pour mixture through a 30 mesh screen.

Mix Ratio

1/1.77 liquid / filler by weight. The use of complete packs is only recommended.

Thinners

Up to 10% THINNER 475 in cool weather, THINNER 312 for hot windy conditions.

Packaging 4L pack - 3.2L resin + 5.8kg zinc dust

10L pack – 8.0L resin + 14.5kg zinc dust

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

CAUTION:

Improper use and handling of this product can be hazardous to health.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your Proper ventilation and protective supervisor. measures must be provided during application and drying to keep spray mists and vapour concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. PPG Industries makes no recommendation about the types of safety measure that may need to be adopted because these depend on application environment and space, of which PPG Industries is unaware and over which it has no control.

If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

This product is for industrial use only.

Technical information given verbally or in writing is based on knowledge and research, given in good faith and believed to be reliable, but no guarantee of accuracy is made or implied. Since methods and conditions of use are beyond our control, all merchandise is sold and received subject to the condition that our liability whether express or implied for any defect in quality, or for any lack of fitness for the specified use thereof, is limited to the return of the purchase price if written claim is made within 14 days from date of delivery. It is recommended that the user makes his or her own tests to determine the suitability of the product for his own requirements. Freedom from patent restrictions is not implied.