

Extruded Two-Layer Polyolefin Resin Coating Systems with Adhesives for Underground or Submerged Pipe

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Foreword

This standard practice provides the material characteristics, application methods, and handling, shipping, and installation procedures for polyolefin resin coating systems extruded over adhesives for the prevention of external corrosion of underground or submerged pipelines. This standard applies to both carbon steel (CS) pipe and ductile iron (DI) pipe when the application of extruded external coatings is described. This standard is intended for use by coating applicators, engineers, and pipeline owners as a guide to specifying application parameters.

Scope

This standard covers the application of two-layer plant-applied polyolefin coating systems.

Rationale

Changes made in this revision are mainly editorial and not substantive. They include eliminating examples, clearing up the function statement regarding the primary and secondary means of corrosion mitigation, and removing redundant language.

Referenced Standards and Other Consensus Documents

Unless specifically dated, the latest edition, revision, or amendment of the documents listed in the table below shall apply.

AMPP/NACE/SSPC, www.ampp.org:

NACE SP0274	High-Voltage Electrical Inspection of Pipeline Coatings
SSPC-SP 6/NACE No. 3	Commercial Blast Cleaning
SSPC-PA 17	Procedure for Determining Conformance to Steel Profile/Surface Roughness/Peak Count Requirements

American Petroleum Institute (API), www.api.org:

API RP 5L1	Recommended Practice for Railroad Transportation of Line Pipe
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ASTM International, www.astm.org:

ASTM D71	Standard Test Method for Relative Density of Solid Pitch and Asphalt (Displacement Method)
ASTM D149	Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies
ASTM D570	Standard Test Method for Water Absorption of Plastics
ASTM D638	Standard Test Method for Tensile Properties of Plastics
ASTM D1000	Standard Test Methods for Pressure-Sensitive Adhesive-Coated Tapes Used for Electrical and Electronic Applications
ASTM D1238	Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer
ASTM D1505	Standard Test Method for Density of Plastics by the Density-Gradient Technique
ASTM D224	Standard Test Method for Rubber Property—Durometer Hardness
ASTM D7091	Standard Practice for Nondestructive Measurement of Dry Film Thickness of Nonmagnetic Coatings Applied to Ferrous Metals and Nonmagnetic, Nonconductive Coatings Applied to Non-Ferrous Metals