



ENGINEERING STAFF
MATERIAL SPECIFICATION

Prepared By: Engineering Staff

Approved By: Jerome T. Schmitz

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Issue Date:	03/01/16
Superseded Date:	01/27/15

MISCELLANEOUS

Alkyd Paint

1. SCOPE

This specification covers a modified alkyd high gloss paint to be used for repainting of existing painted structures.

2. APPLICABLE DOCUMENTS

- 2.1 ASTM International (ASTM) B-117, "Salt-Spray (Fog) Testing."
- 2.2 ASTM International (ASTM) D-610, "Standard Test Method for Evaluating Degree of Rusting on Painted Steel Surfaces."
- 2.3 ASTM International (ASTM) D-3134, "Standard Practice for Establishing Color and Gloss Tolerances."
- 2.4 ASTM International (ASTM) D-4214, "Standard Test Method for Evaluating Degree of Chalking of Exterior Paint Films."
- 2.5 ASTM International (ASTM) D-4541, "Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers."
- 2.6 ASTM International (ASTM) D-2794, "Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)."


3. TERMINOLOGY

3.1 General

- 3.1.1 "Southwest Gas," "Southwest" or "SWG" wherever used in this specification and other related documents will refer exclusively to Southwest Gas Corporation.
- 3.1.2 The terms "approved," "as approved," "satisfactory," "as directed," "or equal" or other similar terms wherever used in this specification and other related documents will mean "as determined by Southwest Gas," unless specifically stated otherwise.
- 3.1.3 "Product Information package" or "PIP" wherever used in this specification and other related documents will mean the required information that a manufacturer must submit to SWG to determine if the product is suitable for use by SWG, unless specifically stated otherwise.



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4. MATERIALS AND MANUFACTURING


- 4.1 The paint shall be capable of being applied in the field using conventional air or airless equipment and/or brush.
- 4.2 The minimum volume solids of the modified alkyd paint shall be 50 percent.
- 4.3 The appearance of the modified alkyd paint is to be a high gloss color as specified on the purchase order.
- 4.4 The paint shall not contain any lead or chromate.
- 4.5 Volatile Organic Compounds (VOCs) shall be no greater than 3.5 pounds per gallon prior to thinning.

5. PERFORMANCE REQUIREMENTS

- 5.1 The modified alkyd paint shall be capable of retaining a minimum of 48 percent (+/-1 percent) of its initial gloss and exhibit no chalking after 230 hours exposure in an Ultraviolet Accelerated Weathering Testing using a UV-B lamp. Gloss shall be measured according to ASTM D-3134 at a temperature of 60°F. Chalking shall be measured according to ASTM D-4214.
- 5.2 The modified alkyd paint shall dry to touch in 2 to 3 hours and be capable of recoating in 16 hours.
- 5.3 In accordance with ASTM B-117, "Salt Spray (Fog) Testing" and ASTM D-610, "Evaluating Degree of Rusting on Painted Steel Surfaces", one coat of the modified alkyd paint shall exhibit a rust grade of 8 or better after 345 hours of exposure. Applied over properly primed steel surface, the paint shall exhibit a rust grade of 10 after 620 hours of exposure with no more than 1/16-inch rust creepage at scribe.
- 5.4 Adhesion shall be no less than 500 psig as measured using ASTM D-4541, "Elcometer Adhesion Test."
- 5.5 Impact Resistance shall be no less than 100-inch pounds direct and 60-inch pounds reverse as measured using ASTM D-2794.



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5. PERFORMANCE REQUIREMENTS (Cont'd)

- 5.6 The paint must be capable of being stored and applied at air and surface temperatures ranging from 50°F to 110°F.
- 5.7 The paint must be capable of being applied at 1.5 to 2.5 mils dry film thickness.

6. INSPECTION


- 6.1 Successful review of the Product Information Package (PIP), as well as any future reference by SWG to the Seller's part number or internal code number in any future contract or purchase, will mean only that no conflict with the specification was found, and will not relieve the Seller from meeting all the requirements of this specification.
- 6.2 SWG retains the option to inspect the manufacture and testing of any and all materials, products or systems referenced in this specification that are sold to SWG.
- 6.3 SWG will make appropriate inspections and tests of any and all materials, products or systems supplied to this specification. SWG will have the right, at their option, to reject any material which fails to conform to this specification. Any such rejection may take place at the manufacturer's facility; the supplier's warehouse or any subsequent delivery location, before or after SWG assumes possession. Notice of the rejection will be made promptly to the supplier by SWG. The defective product will be replaced or returned for credit at the manufacturer's expense.
- 6.4 Any changes in the manufacturing of previously approved paint covered under this document for sale to SWG must be approved by SWG's Engineering Staff. **Failure to obtain SWG's approval may be cause for rejection and disqualification as an approved supplier.**

7. CERTIFICATION

The manufacturer's or supplier's certification will be furnished to SWG. This certification will state that samples representing each lot have been manufactured, tested and inspected in accordance with this specification and that all requirements have been met. When requested or specified in the purchase order or contract, a report of test results will be provided.



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7. CERTIFICATION (Cont'd)

Upon the request of Southwest, the certification of an independent third party indicating conformance to the specification may be considered at Southwest's expense. If the Seller has specifically and clearly listed any items as an "EXCEPTION" to those requirements the Seller will be notified, in writing, by SWG's Engineering Staff that its listed "EXCEPTIONS" have been reviewed and found to be acceptable, no changes will be made to the paint, including product improvement changes, without prior resubmittal of "EXCEPTIONS" and notification in writing by SWG's Engineering Staff that their "EXCEPTIONS" have been found to be acceptable. Once accepted in writing by SWG's Engineering Staff, Seller's listed "EXCEPTIONS" will be made part of the contract or purchase order.

8. SAFETY DATA SHEETS

In accordance with law, the Seller will supply a Safety Data Sheet for all applicable items supplied under this specification to the following:

- 1) The Receiving Location
- 2) Southwest Gas Engineering Staff
- 3) Southwest Gas Corporation
Corporate Safety
Mail Station LVA-120
P.O. Box 98510
Las Vegas, NV 89193-8510

9. PACKAGING AND PACKAGE MARKING


- 9.1 All cans of paint shall be marked with type and color of the contents.
- 9.2 The paint shall be provided in one gallon cans.
- 9.3 The paint shall be packaged in cardboard boxes with 4 cans per box. The box shall be clearly marked identifying the contents and color of the material in the box.
- 9.4 All paint cans shall be marked with storage and application temperatures and application instructions.
- 9.5 All cans and boxes of paint shall be marked with an expiration date showing the end of the useful life of the contents.



SOUTHWEST GAS CORPORATION

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10. STOCK CLASSIFICATION DESCRIPTION

PAINT, ALKYD, HIGH GLOSS, _____ (COLOR), ONE GALLON CANS, NO LEAD.