




**SOUTHWEST GAS CORPORATION**

**ENGINEERING STAFF**

**MATERIAL SPECIFICATION**

<b>Section No:</b>	MS C-5
<b>Page No.:</b>	1 of 5
<b>Issue Date:</b>	03/01/16
<b>Superseded Date:</b>	01/29/15

*Prepared By:* Engineering Staff 

*Approved By:* Jerome T. Schmitz 

**PIPE COATING**

**Liquid Adhesive, For Tape Coating**

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**1. SCOPE**

This specification covers synthetic rubber and resin liquid adhesive to be used in conjunction with tape coatings. The liquid adhesive's purpose is to bond polyethylene tapes to clean steel surfaces, extruded coatings and fusion coatings.

**2. APPLICABLE DOCUMENTS**

- 2.1 ASTM International (ASTM) D-92, "Flash and Fire Points by Cleveland Open Cup."
- 2.2 United States Department of Transportation (DOT), Code of Federal Regulations, Title 49, Part 192, "Transportation of Natural and Other Gas by Pipelines Minimum Safety Standards."

**NOTE:** Unless otherwise specified, the editions of the above documents incorporated by DOT 49 CFR 192 are applicable. Documents not incorporated by DOT 49 CFR 192 will be the most recent edition.

**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.
- 3.1.4 "Product Information Package" or "PIP" wherever used in this specification and other related documents will mean the required technical product information that a manufacturer must submit to Southwest to determine if the product is suitable for use by Southwest, unless specifically stated otherwise.



<b>Section No:</b>	MS C-5
<b>Page No.:</b>	2 of 5
<b>Issue Date:</b>	03/01/16
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**4. MATERIALS AND MANUFACTURING**

- 4.1 The liquid adhesive shall consist of synthetic rubber and resins, carried in a blended petroleum solvent of mixed hydrocarbons.
- 4.2 The percent of solids, by weight, shall be no less than 15% and no more than 30% of the total weight.
- 4.3 The liquid adhesive shall contain a suitable fungicide to nullify the effect of bacteria or fungus attack.

**5. PERFORMANCE REQUIREMENTS**

- 5.1 The maximum service temperature of the liquid adhesive shall not be less than 200°F.
- 5.2 During the application, at a temperature of 77°F and relative humidity of 50°F the liquid adhesive shall have a permanent tack within two to three minutes.
- 5.3 The liquid adhesive shall be non-flammable, except when in the liquid state.
- 5.4 The flash point of the liquid adhesive shall be no less than 40°F as determined by ASTM D-92.

**6. DIMENSIONS AND TOLERANCES**

The liquid adhesive weight shall be no less than 6.3 lbs. /gallon and no more than 10.65 lbs. /gallon.



<b>Section No:</b>	MS C-5
<b>Page No.:</b>	3 of 5
<b>Issue Date:</b>	03/01/16
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**7. INSPECTION**

- 7.1 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.
- 7.2 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.
- 7.3 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.
- 7.4 Any changes in the manufacturing of previously approved materials 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.**

**8. CERTIFICATION**

The manufacturer's or supplier's certification will be furnished to Southwest. This certification shall 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 specified in the purchase order or contract, a report of results will be provided.

Upon the request of Southwest, the certification of an independent third party indicating conformance to the specification may be considered at Southwest's expense.




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<b>Section No:</b>	MS C-5
<b>Page No.:</b>	4 of 5
<b>Issue Date:</b>	03/01/16
<b>Superseded Date:</b>	01/29/15

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**9. SAFETY DATA SHEETS**

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

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

**10. PACKAGING AND PACKAGE MARKING**

Liquid adhesive shall be supplied in aerosol cans, quarts, gallons or 5-gallon pails.

**11. STOCK CLASS DESCRIPTION**

PRIMER, LIQUID ADHESIVE, STEEL, FOR USE WITH TAPE COATINGS, \_\_\_\_\_ SIZE (AEROSOL IF APPLICABLE) CAN (PAIL IF APPLICABLE).