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Issue Date:	03/01/16
Superseded Date:	01/29/15

Prepared By: Engineering Staff 

Approved By: Jerome T. Schmitz 

PIPE COATING

Grease

1. SCOPE

This specification covers grease coating used for coating valves and other bulky and irregularly shaped pipeline components.

2. APPLICABLE DOCUMENTS

- 2.1 ASTM International (ASTM) D-92, "Flash and Fire Points by Cleveland Open Cup."
- 2.2 ASTM International (ASTM) D-97, "Pour Point of Petroleum Oils."
- 2.3 ASTM International (ASTM) D-937, "Cone Penetration of Petroleum."
- 2.4 ASTM International (ASTM) G-8, "Standard Test Methods for Cathodic Disbonding of Pipeline Coatings."
- 2.5 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.



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4. MATERIALS AND MANUFACTURING

The grease shall be ecologically neutral and non-toxic.

5. PERFORMANCE REQUIREMENTS

- 5.1 The grease shall be resistant to corrosive chemicals and soils, moisture, and oxidation.
- 5.2 The grease shall be applicable at temperatures ranging between 32°F and 180°F.
- 5.3 The grease shall allow a minimum build of 1/4-inch of material for all applications.
- 5.4 The properties of the grease shall be in accordance with Table C-6.1

PROPERTY	VALUE	TEST METHOD
Dielectric Strength, V/mil	100 Volts/mil	
Cone Penetration at 77°F	130 (minimum) 190 (maximum)	ASTM D-937
Pour Point	200°F (minimum)	ASTM D-97
Flash Point	300°F (minimum)	ASTM D-92
Salt Crock Test	3 in ² max. disbonded area @ 3.5 volts for 10 days.	ASTM G-8

TABLE C-6.1

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.



SOUTHWEST GAS CORPORATION

ENGINEERING STAFF

MATERIAL SPECIFICATION

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6. INSPECTION (Cont'd)

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 materials, products or systems described in this material specification 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 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.

8. 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



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9. PACKAGING AND PACKAGE MARKING

- 9.1 Grease shall be supplied in 3-gallon pails, approximately 24 lbs. per pail.
- 9.2 Pails shall be made of white plastic or metal.

10. STOCK CLASS DESCRIPTION

COATING, STEEL, GREASE, HIGH AMBIENT TEMPERATURE, 3-GALLON PAIL, 24 POUNDS PER PAIL, PAILS SHALL BE WHITE PLASTIC OR METAL