

Specification for PVC Lined Steel Tubular Goods

API SPECIFICATION 15LT (SPEC 15LT)
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FOREWORD

Purpose Statement

a. The purpose of this Specification is to provide standards for PVC lined steel pipe or tubing, suitable for use in conveying water and/or oil in the Petroleum Industry.

b. American Petroleum Institute (API) Specifications are published as aids to the procurement of standardized equipment and materials, as well as instructions to manufacturers of equipment or materials covered by an API Specification. These Specifications are not intended to obviate the need for sound engineering, nor to inhibit in any way anyone from purchasing or producing products to other specifications.

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f. This Specification for PVC lined steel tubular goods was formulated by the API Production Department Committee on Standardization of Plastic Pipe.

g. This Standard (supplement) shall become effective on the date printed on the cover but may be used voluntarily from the date of distribution.

SUGGESTIONS FOR ORDERING**SUGGESTIONS FOR ORDERING API PVC LINED STEEL LINE PIPE**

In placing orders for PVC Lined Steel Line Pipe to be manufactured in accordance with API Specification 15LT, the purchaser should specify the following on the purchase order:

Specifications	API Specification 15LT
Quantity	
Steel Pipe Grade or Class	API Specification 5L, Table 3.1 & 4.1
New Steel Pipe Furnished by Purchaser	
Used Steel Pipe Furnished by Purchaser	
New Steel Pipe Furnished by Manufacturer	
Process of Pipe Manufacture	API Specification 5L, Table 2.1
Size Nominal	
Weight per Foot or Wall Thickness	
Length	
Inspection of Pipe by Purchaser	Section 8
Fittings	Paragraph 7.2
PVC Liner Class	API Specification 15LT, Paragraph 4.1
Size Nominal	Table 5.2
SDR or Wall Thickness	Table 5.1, 5.2
End Protection	Section 6
Rejection of PVC Liner	Paragraph 5.1.g

Delivery Date & Shipping Instructions

Attention is called to the following stipulations which are subject to agreement between the purchaser and the manufacturer:

Hydrostatic Tests and Frequency	Paragraph 3.2.a
End Protection	Section 6
Inspection	Section 8
Marking Requirements	Section 9 & Appendix B
Rejection of Steel Tubular	Paragraph 3.2.h
Acceptance	Appendix E
Testing	Section 5

SPECIAL NOTE:

Nothing in this specification should be interpreted as indicating a preference by the Committee for any material or process or as indicating equality between the various materials or processes. In the selection of materials and processes, the purchaser must be guided by his experience and by the service for which the PVC lined steel pipe is intended.

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SUGGESTIONS FOR ORDERING API PVC LINED STEEL TUBING

In placing orders for PVC Lined Steel Tubing to be manufactured in accordance with API Specification 15LT, the purchaser should specify the following on the purchase order:

Specification	API Specification 15LT
Quantity	
Type of Tubing	API Specification 5CT Per Table 2.1
Non-Upset, External-Upset or Integral Joint	
Threaded, Plain-End or Special End	
With or Without Couplings	
Special Bevel Couplings	
Special-Clearance Couplings	
New Steel Tubing Furnished by Purchaser	
Used Steel Tubing Furnished by Purchaser	
New Steel Tubing Furnished by Manufacturer	
Used Steel Tubing Furnished by Manufacturer	
Size (outside diameter)	
Weight per foot or Wall Thickness	
Grade	
Range Length	
Inspection of Tubing by Purchaser	Section 8
PVC Liner Class	API Specification 15LT Paragraph 4.1
Size Nominal	Table 5.3
SDR or Wall Thickness	Table 5.1, 5.3
End Protection	Section 6
Rejection of PVC Liner	Paragraph 5.1.g

Delivery Date & Shipping Instructions

Attention is called to the following stipulations which are subject to agreement between the purchaser and the manufacturer:

Coupling Make-Up (Other than power-tight)	API Specification 5CT
Tubing with Couplings Detached	API Specification 5CT
Hydrostatic Tests and Frequency	Paragraph 3.2.a
End Protection	Section 6
Inspection	Section 8
Marking Requirements	Section 9 & Appendix B
Rejection of Steel Tubular	Paragraph 3.2.h
Acceptance	Appendix E
Testing	Section 5

SPECIAL NOTE:

Nothing in this specification should be interpreted as indicating a preference by the Committee for any material or process or as indicating equality between the various materials or processes. In the selection of materials and processes, the purchaser must be guided by his experience and by the service for which the PVC lined steel tubing is intended.

SECTION 1 SCOPE

1.1 COVERAGE

a. This specification covers PVC lined steel line pipe and tubing. Dimensions, materials and physical properties are included.

b. Technical content provides requirements for performance, materials, dimensions and weight; test and inspection; marking and storing.

NOTE 1: PVC lined accessories and fittings are available, but are beyond the scope of this specification. Consult the appropriate manufacturer regarding PVC lined accessories and fittings.

NOTE 2: Mortars and/or adhesives may be used in the fabrication of PVC lined steel line pipe and tubing.

1.2 APPLICATIONS

a. **PRODUCTS.** These specifications apply to polyvinyl chloride (PVC) lining of steel line pipe and tubing used as a barrier for shielding the steel from corrosion attack in the handling of oilfield fluids. Specific products covered by the specification are listed as follows:

1. Line Pipe
2. Tubing

b. **SERVICE LIMITATIONS.** The standard service conditions are as follows:

- Service temperature is 150°F maximum.
- Use of products covered by this specification should be limited to published industry data in the absence of tests for specific applications. A recommended chemical

resistance table (Appendix A) lists general resistances to many specific chemical compounds at 0 psig for 72°F and 140°F. It is suggested tests be conducted for special pressure/temperature and multi-phase conditions.

- Gases under elevated pressure service conditions are not recommended.

- Special attention should be made toward, but not limited to certain aromatic chemicals, such as benzene, toluene, xylene and ketones.

1.3 GENERAL. This specification includes by reference, either in total or in part, other API, industry, and government standards listed in Appendix C.

a. **REQUIREMENTS.** Requirements of other standards included by references in this Specification are essential to the safety and of the equipment produced within a given system.

b. **EQUIVALENT STANDARDS.** Other nationally or internationally recognized standards shall be submitted to and approved by the API Committee on Standardization of Plastic Pipe for inclusion in this Specification prior to use as equivalent standards.

1.4 UNIT CONVERSIONS. U. S. Customary units are in all cases preferential and shall be the standard in this Specification. Nominal sizes will continue to be shown as fractions. For the purposes of this Specification the fractions and their decimal equivalents are equal and interchangeable. Metric conversions are described in Appendix D.