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**SANS 10087-1:2013**

Edition 6

## **SOUTH AFRICAN NATIONAL STANDARD**

**The handling, storage, distribution  
and maintenance of liquefied petroleum  
gas in domestic, commercial, and  
industrial installations**

**Part 1: Liquefied petroleum gas installations  
involving gas storage containers of  
individual water capacity not exceeding  
500 L and a combined water capacity  
not exceeding 3 000 L per installation**

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## SANS 10087-1:2013

Edition 6

### Table of changes

Change No.	Date	Scope

### Foreword

This South African standard was approved by National Committee SABS/TC 1019, *Gas supply, handling and control (fuel, industrial and medical gases)*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in August 2013.

This document supersedes SANS 10087-1:2008 (edition 5).

**This document is referenced in the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).**

SANS 10087 consists of the following parts, under the general title *The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations*:

*Part 1: Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500 L and a combined water capacity not exceeding 3 000 L per installation.*

*Part 2: Installation of LPG systems in mobile units, including but not limited to caravans, motor homes, park homes and mobile kitchens.*

*Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 500 L.*

*Part 4: The transportation of LP gas including the design, construction, inspection, fittings, filling, maintenance and repair of LP gas bulk vehicles and rail tank cars.*

*Part 6: The application of liquefied petroleum and compressed natural gases as engine fuels for internal combustion engines.*

*Part 7: Storage and filling premises for refillable liquefied petroleum gas (LPG) containers of gas capacity not exceeding 9 kg and the storage of individual gas containers not exceeding 48 kg.*

*Part 8: Filling containers for LP gas operated fork lift vehicles in-situ.*

*Part 10: Mobile filling stations for refillable liquefied petroleum gas (LPG) containers of capacity not exceeding 9 kg.*

This document was written in order to support a specific South African Regulation and, of necessity, includes references to South African legislation. It therefore might not be suitable for direct application in other jurisdictions where conflicting legislation exists.

Annex A forms an integral part of this document. Annexes B, C, D, E and F are for information only.

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# **The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations**

## **Part 1:**

Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500 L and a combined water capacity not exceeding 3 000 L per installation

## **1 Scope**

**1.1** This part of SANS 10087 specifies requirements for the materials, the methods of construction and the installation of equipment used in liquefied petroleum gas applications for domestic and commercial installations that involve gas containers of individual water capacity not exceeding 500 L and of a combined water capacity not exceeding 3 000 L.

NOTE For the storage of containers for retail and exchange purposes, see SANS 10087-3 or SANS 10087-7 as applicable.

**1.2** It also specifies the maintenance, inspection and testing of the various components of the equipment.

**1.3** It covers the installation of appliances, piping, fittings and other components.

NOTE For industrial installations, see SANS 10087-3.

## **2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

ANSI LC-1/CSA 6.26, *Fuel gas piping systems using corrugated stainless steel tubing (CSST)*.

API Spec 5L, *Specification for line pipe*.

AS 4176, *Polyethylene/aluminium and cross-linked polyethylene/aluminium macro-composite pipe systems for pressure applications*.

ASME-BPVC 7, *Construction of pressure vessels*.