

Proposed additions are underlined
Proposed deletions are ~~strikethrough~~

Title 4. Business Regulations

Division 9. Division of Measurement Standards, Department of Food and Agriculture

Chapter 1. Tolerances and Specifications for Commercial Weighing and Measuring Devices

Article 1. National Uniformity, Exceptions and Additions

and

Chapter 7. Advertising and Labeling of Gasoline and Other Motor Vehicle Fuels

Chapter 1. Tolerances and Specifications for Commercial Weighing and Measuring Devices

§ 4001. Exceptions.

The following regulations in Handbook 44 are not adopted or incorporated by reference:

1.10. General Code.

G-S.1.2. Remanufactured Devices and Remanufactured Main Elements.

G-T.1. Acceptance Tolerances.

(b) equipment that has been placed in commercial service within the preceding 30 days and is being officially tested for the first time;

(c) equipment that has been returned to commercial service following official rejection for failure to conform to performance requirements and is being officially tested for the first time within 30 days after corrective service;

(d) equipment that is being officially tested for the first time within 30 days after major reconditioning or overhaul;

2.20. Scales.

S.1.8.4. Customer's Indications.

N.3. Minimum Test Weights and Test Loads*.

UR.2.6.1 Vehicle Scales.

UR.3.7. Minimum Load on a Vehicle Scale.

3.30. Liquid-Measuring Devices.

S.2.8. Exhaustion of Supply, Lubricant Devices Other than Meter Types.

N.4.1.1. Wholesale Devices Equipped ~~With~~ with Automatic Temperature Compensating Systems.

N.5. Temperature Correction on Wholesale Devices.

3.31. Vehicle-Tank Meters.

UR.2.2. Ticket Printer; Customer Ticket.

3.32. Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices.

S.2.6. Automatic Temperature Compensation.

N.4.1.1. Automatic Temperature Compensation.

UR.2.3. Vapor Return Line.

3.33. Hydrocarbon Gas Vapor-Measuring Devices.

S.4.3. Temperature Compensation.

3.37. Mass Flow Meters.

S.1.3.1.1. Compressed Natural Gas Used as an Engine Fuel.

S.1.3.1.2. Liquefied Natural Gas Used as an Engine Fuel.

S.5.2. Marking of Equivalent Conversion Factors for Compressed Natural Gas.

S.5.3. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.

UR.3.1.1. Marking of Equivalent Conversion Factors for Compressed Natural Gas.

UR.3.1.2. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.

3.39. Hydrogen Gas-Measuring Devices.

Section 3.39. Hydrogen Gas-Measuring Devices - Tentative Code

A.2. Exceptions

(c). Devices used for dispensing a hydrogen gas with a hydrogen fuel index lower than 99.97 % and concentrations of specified impurities that exceed level limits.

A.4. Type Evaluation.

N.3. Test Drafts.

N.4.1. Master Meter (Transfer) Standard Test.

N.4.2. Gravimetric Tests.

N.4.3. PVT Pressure Volume Temperature Test.

N.6.1.1. Repeatability Tests.

T.2. Tolerances.

Table T.2.

T.3. Repeatability.

Appendix D. Definitions for:

Automatic Temperature or Density Compensation

Diesel Gallon Equivalent (DGE).

Gasoline Gallon Equivalent (GGE).

Remanufactured Device.

Remanufactured Element.

Repaired Device.

~~Remanufactured Element.~~

Repaired Element.

Note: Authority cited: Sections 12027 and 12107, Business and Professions Code. Reference: Section 12107, Business and Professions Code.

§ 4002.8. Liquid-Measuring Devices. (3.30.)

S.1.6.7.1 Recorded Representations, Retail Motor-Fuel Device Equipped with Automatic Temperature Compensation. – In addition to the requirements in S.1.6.7 Recorded Representations., a printed receipt issued by a retail motor-fuel dispenser equipped with an automatic temperature compensator shall state the following:

- (a) “Temperature Compensated” or
- (b) “Temp. Comp.”

S.2.8. Retail Motor-Fuel Devices Equipped with Automatic Temperature Compensators.

S.2.8.1. Automatic Temperature Compensation. – A device may be equipped with an automatic means for adjusting the indication and registration of the measured volume of product to the volume at 15 °C (60 °F).

S.2.8.2. Provision for Deactivating. – On a device equipped with an automatic temperature-compensating mechanism that will indicate or record in terms of liters or gallons compensated to 15 °C (60 °F), provision shall be made for deactivating the automatic temperature-compensating mechanism so that the meter can indicate and record, if it is equipped to record, in terms of the uncompensated volume.

S.2.8.3. Provision for Sealing Automatic Temperature-Compensating Systems – Provision shall be made for applying security seals in such a manner that an automatic temperature-compensating system cannot be disconnected and that no adjustment may be made to the system without breaking the seal.

S.2.8.4. Temperature Determination with Automatic Temperature-Compensation – For test purposes, means shall be provided (e.g., thermometer well) to determine the temperature of the liquid either:

- (a) in the liquid chamber of the meter; or
- (b) immediately adjacent to the meter in the meter inlet or discharge line.

S.2.9. Exhaustion of Supply, Lubricant Devices Other than Meter Types. – When the level of the supply of lubricant becomes so low as to compromise the accuracy of measurement, the device shall:

- (a) automatically become inoperable; or
- (b) give a conspicuous and distinct warning.

S.4.4.3. Temperature Compensation for Retail Motor-Fuel Devices. – If a device is equipped with an automatic temperature compensation, the primary indicating elements, recording elements, and recorded representation shall be clearly and conspicuously marked to show that the volume delivered has been adjusted to the volume at 15 °C (60 °F).

(a) N.4.1.1 Wholesale Devices and Retail Motor-Fuel Devices Equipped With with Automatic Temperature Compensating Systems. – On wholesale devices and retail motor-fuel devices equipped with automatic temperature compensating systems, normal tests:

(1a) shall be conducted with the temperature compensating system connected and operating by comparing the compensated volume indicated or recorded to the actual delivered volume corrected to 60°F, and

(2b) may be conducted with the temperature compensating system deactivated by comparing the uncompensated volume indicated or recorded to the actual delivered volume.

The first test shall be performed with the automatic temperature compensating system operating in the “as found” condition.

On devices that indicate or record both the compensated and uncompensated volume for each delivery, the tests in (1a) and (2b) may be performed as a single test.

N.5. Temperature Correction on Wholesale Devices and Retail Motor-Fuel Devices – Corrections shall be made for any changes in volume resulting from the differences in liquid temperatures between time of passage through the meter and time of volumetric determination in the prover. When adjustments are necessary, appropriate petroleum measurement tables should be used.

UR.3.7. Temperature Compensation, Retail Motor-Fuel Devices.

UR.3.7.1. Automatic Temperature-Compensator. – If a device is equipped with an automatic temperature compensator, it shall be connected, operable, and in use at all times. An automatic temperature-compensating system shall not be removed, nor shall a compensated device be replaced with an uncompensated device, without the written approval of the responsible weights and measures jurisdiction.

Note: This requirement does not specify the method of sale for product measured through a meter.

UR.3.7.2. Recorded Representations. – A printed receipt based on a reading of a retail motor-fuel device equipped with an automatic temperature compensator shall show that the volume delivered has been adjusted to the volume at 15 °C (60 °F), e.g., Temperature Compensated or Temp. Comp.

UR.3.7.3. Reference Fuel Densities for Automatic Temperature Correction. – The fuel density values used to determine corrected volume for retail motor-fuel dispensers equipped with automatic temperature compensation shall be those listed in Table 3. Fuel Densities for Automatic Temperature Correction.

<u>Table 3. Fuel Densities for Automatic Temperature Correction</u>	
<u>Fuel</u>	<u>Standard Fuel Density for Retail Transactions</u>
<u>Gasoline, gasoline-oxygenate blends (3.7 mass percent oxygen, maximum), gasoline ethanol blends (10 volume percent maximum)</u>	<u>745 kg/m³</u>
<u>Diesel fuel (grade 2-D), biodiesel blends (20 volume percent biodiesel, maximum), renewable diesel fuel</u>	<u>850 kg/m³</u>

UR.3.7.4. Period of Use. – When fuel is bought or sold on an automatic temperature-compensated basis, it shall be bought or sold using this method over at least a consecutive 12-month period.

UR.3.7.5. Automatic Temperature Compensation at a Single Place of Business – When retail motor-fuel dispensers equipped with automatic temperature compensators are operated at a single place of business, all the dispensers at that location shall be equipped with automatic temperature compensators.

Appendix D. Definitions

automatic temperature or density compensation. – The use of integrated or ancillary equipment to obtain from the output of a volumetric meter an equivalent mass, or an equivalent liquid volume at the assigned reference temperature below and a pressure of 14.696 lb/in² absolute.

Cryogenic liquids: 21 °C (70 °F) [3.34]

Hydrocarbon gas vapor: 15 °C (60 °F) [3.33]

Liquid carbon dioxide: 21 °C (70 °F) [3.38]

Liquefied petroleum gas (LPG) and Anhydrous ammonia: 15 °C (60 °F) [3.32]

Liquid fuels and lubricants: 15 °C (60 °F) [3.30]

Note: Authority cited: Sections 12027 and 12107, Business and Professions Code. Reference: Section 12107, Business and Professions Code.

Chapter 7. Advertising and Labeling of Gasoline and Other Motor Vehicle Fuels

§ 4200. Advertising Medium.

- (a) "Advertising medium," as used in this chapter, includes banner, sign, placard, poster, streamer and card, whether or not mounted, whether appearing on the same or different standards, or whether or not physically connected with each other; provided, the advertised statements can reasonably be read as one advertising message.
- (b) In addition to the requirements of this section and Section 13532, Business and Professions Code, when gasoline or other motor vehicle fuel is sold on a temperature compensated basis at a location, all advertising mediums shall include the words "Temperature Compensated" or "Temp. Comp." for all prices and grades of gasoline or motor vehicle fuel sold at that location.
 - (1) The words "Temperature Compensated" or "Temp. Comp." shall be displayed on the advertising medium in letters not less than one-third the size of the numerals designating the price.
 - (2) All sales of fuel on a temperature compensated basis at a location shall be advertised as such for at least a consecutive 12-month period.
- (c) For purposes of this chapter, automatic temperature compensation requirements apply only to the following motor vehicle fuel products: gasoline, gasoline-oxygenate blends (3.7 mass percent oxygen, maximum), gasoline ethanol blends (10 volume percent maximum), diesel fuel (grade 2-D), biodiesel blends (20 volume percent biodiesel, maximum), and renewable diesel fuel.

Note: Authority cited: Sections 12027, Business and Professions Code. Reference: Sections 13531, 13532, 13534, 13535, 13536, 13537, 13538, 13539, and 13540, Business and Professions Code.

§ 4200.1 Illumination.

In addition to the requirements of Section 13536, Business and Professions Code, when any advertising message is illuminated, the entire message shall be uniformly illuminated.

Note: Authority cited: Section 12027, Business and Professions Code. Reference: Section 13536, Business and Professions Code.

§ 4201.1. Labeling on Dispensing Apparatus Equipped with Automatic Temperature Compensation.

In addition to Section 4201, when motor vehicle fuel is sold on a temperature compensated basis, the dispenser shall be labeled with the words "Temperature Compensated to 15 °C (60 °F)" or "Temp Comp to 15 °C (60 °F)" in letters and numerals not less than one-half inch (12.70 mm) in height and one-sixteenth inch (1.59 mm) in width.

Note: Authority cited: Section 12027, Business and Professions Code. Reference: Sections 13470 and 13480, Business and Professions Code.

~~§ 4205. Illumination.~~

~~In addition to the requirements of Section 13536, Business and Professions Code, when any advertising message is illuminated, the entire message shall be uniformly illuminated.~~

~~Note: Authority cited: Section 12027, Business and Professions Code. Reference: Section 13536, Business and Professions Code.~~