

The Uniform Laws and Regulations for commercial hydrogen measurement shown below were excerpted from the 2019 edition of NIST Handbook 130 “Uniform Laws and Regulations in the Areas of Legal Metrology and Fuel Quality.” This regulation was adopted in July 2018 by the 103rd National Conference on Weights and Measures, Inc. (NCWM)¹. A copy of the entire Handbook 130 is available for download at: <https://www.nist.gov/pml/weights-and-measures/publications/nist-handbooks/handbook-130>.

The purpose of these Uniform Laws and Regulations is to achieve, to the maximum extent possible, uniformity in weights and measures laws and regulations among the various states and local jurisdictions in order to facilitate trade between the states, permit fair competition among businesses, and provide uniform and sufficient protection to all consumers in commercial weights and measures practices.

IV. Uniform Regulations

B. Uniform Regulation for the Method of Sale of Commodities

Section 2. Non-Food Products ^[NOTE 1, page 109]

2.32. Retail Sales of Hydrogen Fuel (H).

2.32.1. Definitions for Hydrogen Fuel. – A fuel composed of molecular hydrogen intended for consumption in a surface vehicle or electricity production device with an internal combustion engine or fuel cell.

(Amended 2012)

2.32.2. Method of Retail Sale and Dispenser Labeling. – All hydrogen fuel kept, offered, or exposed for sale and sold at retail shall be in mass units in terms of the kilogram. The symbol for hydrogen vehicle fuel shall be the capital letter “H” (the word Hydrogen may also be used).

2.32.3. Retail Dispenser Labeling.

- (a) A computing dispenser must display the unit price in whole cents on the basis of price per kilogram.
- (b) The service pressure(s) of the dispenser must be conspicuously shown on the user interface in bar or the SI Unit of Pascal (Pa) (e.g., MPa).
- (c) The product identity must be shown in a conspicuous location on the dispenser.
- (d) National Fire Protection Association (NFPA) labeling requirements also apply.
- (e) Hydrogen shall be labeled in accordance with 16 CFR 309 – FTC Labeling Alternative Fuels.

¹ The National Conference on Weights and Measures (NCWM) is supported by the National Institute of Standards and Technology (NIST) in partial implementation of its statutory responsibility for “cooperation with the states in securing uniformity in weights and measures laws and methods of inspection.

2.32.4. Street Sign Prices and Advertisements.

- (a) The unit price must be in terms of price per kilogram in whole cents (e.g., \$3.49 per kg, not \$3.499 per kg).
- (b) The sign or advertisement must include the service pressure (expressed in megapascals) at which the dispenser(s) delivers hydrogen fuel (e.g., H35 or H70).

(Added 2010)