

The Uniform Laws and Regulations for commercial hydrogen measurement shown below were excerpted from the 2013 edition of NIST Handbook 130 “Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality” as adopted in July 2012 by the 97th National Conference on Weights and Measures, Inc. (NCWM)¹. A copy of the entire Handbook 130 is available for download at <http://www.nist.gov/pml/wmd/pubs/hb130-13.cfm>.

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

G. Uniform Engine Fuels and Automotive Lubricants Regulation

Section 1. Definitions

1.21. Fuel Cell. – An electrochemical energy conversion device in which fuel and an oxidant react to generate electricity without consumption, physically or chemically, of its electrodes or electrolytes.

(Added 2012)

1.29. 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.

(Added 2012)

1.30. Internal Combustion Engine. – A device used to generate power by converting chemical energy bound in the fuel via spark-ignition or compression ignition combustion into mechanical work to power a vehicle or other device.

(Added 2012)

Section 2. Standard Fuel Specifications

2.17. Hydrogen Fuel. – Shall meet the latest version of SAE J2719, “Hydrogen Fuel Quality for Fuel Cell Vehicles.”

(Added 2012)

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.*