

## PROPOSED REGULATORY TEXT

The latest proposed text of the regulation is shown below with deletions to the previously posted version of September 13, 2016 indicated by a single strikethrough. The previous versions posted on June 24, 2016 and September 13, 2016 are available on the Department's website at <https://www.cdfa.ca.gov/dms/regulations.html>.

### DEPARTMENT OF FOOD AND AGRICULTURE DIVISION OF MEASUREMENT STANDARDS

#### Title 4, Division 9, Chapter 6. Automotive Product Specifications

#### Article 10. Specifications for Natural Gas Used as a Motor Vehicle Fuel.

##### 4192. Definitions Used in This Article.

(a) Natural gas means a mixture of hydrocarbon compounds consisting of primarily methane in the form of a compressed gas or a cryogenic liquid intended for use as a motor vehicle fuel.

(b) Wobbe Index means the ratio of the higher heating value of a gaseous fuel at specified reference conditions and the square root of its relative density at the same reference conditions.

##### 4193. Specifications for Natural Gas Used as a Motor Vehicle Fuel.

Effective January 1, 2018, natural gas fuel sold for use in internal combustion engines shall meet the requirements of the latest version of SAE International J1616 "Standard for Compressed Natural Gas Vehicle Fuel."

The following table summarizes the specifications included in SAE J1616 and test methods for their determination. The latest version of SAE J1616 provides the units with minimum and/or maximum values for each specification.

| Specification              | Test Method                     |
|----------------------------|---------------------------------|
| Wobbe Index                | ASTM 3588 or ISO 6976           |
| Water Dew Point            | ASTM D1142, D5454 or equivalent |
| Methane                    | ASTM D1945 or D7833             |
| Ethane                     | ASTM D1945 or D7833             |
| C3 and higher hydrocarbons | ASTM D1945 or D7833             |
| C6 and higher hydrocarbons | ASTM D1945 or D7833             |
| Hydrogen                   | ASTM D2650, D1945 or D7833      |

|   |   |
|---|---|
| Carbon monoxide                           | ASTM D2650, D1945 or D7833                              |
| Oxygen                                    | ASTM D1945 or D7833                                     |
| Sum of CO <sub>2</sub> and N <sub>2</sub> | ASTM D1945 or D7833                                     |
| Total Sulfur (includes odorant)           | ASTM D4084, D4810, D4468, D5504, D6228, D6968, or D7551 |
| Hydrogen Sulfide                          | ASTM D4084, D4810, D4468, D5504, D6228, or D7551        |
| Particulate size                          | None specified  |
| Silicon                                   | None specified  |

Other applications: Natural gas not sold as a motor vehicle fuel is exempt from these fuel quality specifications.

NOTE: Authority cited: Sections 12027 and 13446, Business and Professions Code. Reference: Sections 13400 (b) (9), 13400 (c), 13400 (g), 13400 (p), 13400 (t), 13413 (a), 13413 (b)(1), 13440, 13591, 13592 and 13595 (a), Business and Professions Code.

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