

## Content

Title : Amendment to the Standards for the Composition of Mobile pollution source Fuels [Ch](#)

Date : 2020.03.20

Legislative : Revision to full text in 7 articles promulgated by Order Huan-Shu-Kong-Tzu No.1090019185 on March 20,2020, and name revised; the original name was "Standards for the Composition of Automobile Gasoline and Diesel Fuels."

Content : Article 1 These Standards are determined pursuant to Article 39, Paragraph 3 of the Air Pollution Control Act.

Article 2 The terms used in these Standards are defined as follows.

"Gasoline characteristics" mean the physical and chemical characteristics of gasoline insofar as they are able to influence the pollution emissions of gasoline engine moving pollution source, and includes benzene content, aromatics content, olefins content, sulfur content, oxygen content and vapor pressure.

"Diesel characteristics" means the physical and chemical characteristics of diesel fuel insofar as they are able to influence the pollution emissions of diesel engine vehicles, and includes sulfur content, polycyclic aromatic hydrocarbons content and Cetane Index.

"Benzene content" means the total amount of benzene contained in the gasoline.

"Sulfur content" means the total amount of sulfur and its compounds in gasoline or diesel fuel, ships fuel and aviation fuel.

"Vapor pressure" is a method of expressing gasoline volatility, and means the vapor pressure of gasoline at 37.8°C (100°F) when the volume ratio of vapor to liquid gasoline is four to one.

"Oxygen content" refers to the total oxygen weight percentage of oxygenates which have been added to gasoline. The most commonly used oxygenates are methyl tertiary-butyl ether (MTBE), ethyl tertiary-butyl ether (ETBE), tertiary-amyl methyl ether (TAME), diisopropyl ether (DIPE), ethanol, and methanol.

"Aromatics content" means the total amount of benzene, methylbenzene, ethylbenzene, xylene and aromatic hydrocarbon compounds above C9 in gasoline.

"Olefins content" means total amount of olefins in gasoline.

"Cetane index" is a method of expressing the ignition performance of diesel fuel, and is calculated based on the density and distillation temperature in accordance with the Chinese National Standard 12016 (CNS 12016) or 12761 (CNS 12761).

"Polycyclic aromatic hydrocarbons (PAH) content" means the total amount of aromatic hydrocarbons contained in diesel excluding monocyclic aromatics.

"Gasohol" means fossil gasoline blended with fuel ethanol, or denatured fuel ethanol not blended with fossil gasoline and used directly as a fuel.

"Biodiesel" means fossil diesel fuel blended with fatty acid methyl ester, or fatty acid methyl ester not blended with fossil diesel fuel and used directly as a fuel.

"Ships fuel" means fuel used in any ship engine, boiler or other combustion equipment, including marine gas oil, marine diesel oil and fishing boat fuel.

"Aviation fuel" means aviation kerosene and aviation gasoline added to commercial aircrafts.

Article 3 Gasoline (including E3 gasohol) characteristics standards are as shown below:

I. The following table contains gasoline characteristics standards effective as of January 1, 2012:

Item	Standard Value
Benzene	1.0 %(v/v), max
Sulfur	10 mg/kg, max
Vapor Pressure	60 kPa, max
Oxygen	2.7 %(m/m), max
Aromatics	35 %(v/v), max
Olefins	18 %(v/v), max

Remark:

1. Until E3 gasohol is applied nationwide, the standard value of vapor pressure will be 66.9 kPa, the standard value of oxygen content will be 3.24% (m/m), and the standard values for remaining regulated items will be the same as in the table for E3 gasohol.
2. Gasoline produced from refineries shall comply with these standards starting from January 1, 2012. Fuel depots and filling stations shall complete stock replacement tasks by July 1, 2012.
3. Imported gasoline shall comply with these standards starting from January 1, 2012.

II. The following table contains gasoline characteristics standards effective as of July 1, 2020:

Item	Standard Value
Benzene	0.9%(v/v), max
Sulfur	10 mg/kg, max
vapor pressure	60 kPa, max
Oxygen	2.7%(m/m), max
Aromatics	35%(v/v), max
Olefins	18%(v/v), max

Remark:

1. Until E3 gasohol is applied nationwide, the standard value of Vapor pressure will be 66.9 kPa, the standard value of oxygen content will be 3.24% (m/m), and the standard values for remaining regulated items will be the same as in the table for E3 gasohol.
2. Gasoline produced from refinery shall comply with these standards starting from July 1, 2020; oil storage facilities shall complete stock replacement tasks by January 1, 2021 in order to achieve compliance with these standards.
3. Imported gasoline shall comply with these standards starting from July 1, 2020.

III. The following table contains gasoline characteristics standards effective as of January 1, 2024:

Item	Standard Value
Benzene	0.8%(v/v), max
Sulfur	10 mg/kg, max
vapor pressure	60 kPa, max
Oxygen	2.7% (m/m), max
Aromatics	35% (v/v), max
Olefins	18% (v/v), max

Remark:

1. Until E3 gasohol is applied nationwide, the standard value of Vapor pressure will be 66.9 kPa, the standard value of oxygen content will be 3.24% (m/m), and the standard values for remaining regulated items will be the same as in the table for E3 gasohol.
2. Gasoline produced from refinery shall comply with these standards starting from January 1, 2024; oil storage facilities shall complete stock replacement tasks by July 1, 2024 in order to achieve compliance with these standards.
3. Imported gasoline shall comply with these standards starting from January 1, 2024.

Article 4 Diesel (including biodiesel) characteristics standards are as shown below:

I. The following table contains diesel characteristics standards effective as of July 1, 2011:

Item	Standard Value
Sulfur	10 mg/kg, max
Cetane index	48, min
polycyclic aromatic hydrocarbons	11 %(m/m), max

Remark:

Diesel shipped from refineries shall comply with these standards starting from July 1, 2011. Fuel depots and filling stations shall complete stock replacement tasks by January 1, 2012 in order to achieve compliance with these standards.

Imported diesel shall achieve compliance with these standards by July 1, 2011

II. The following table contains diesel fuel characteristics standards effective as of July 1, 2020:

Item	Standard Value
Sulfur	10 mg/kg, max
Cetane index	48 min
polycyclic aromatic hydrocarbons	8 %(m/m), max

Remark:

Diesel shipped from refineries shall comply with these standards starting from July 1, 2020. Fuel depots and filling stations shall complete stock replacement tasks by January 1, 2021 in order to achieve compliance with these standards.

Imported diesel shall comply with these standards starting from July 1, 2020.

Military combat vehicles may not apply to these standards.

Article 5 The following table contains ships fuel characteristics standards:

Item	Standard Value
Sulfur	0.5% (m/m), max

Remark:

Ship fuel domestically sold or used shall comply with these standards from July 1, 2020. However ships that are with the same emission reduction device and obtained the permission from competent authority via proposal. may not apply the preceding paragraph.

Article 6 The following table contains aviation fuel characteristics standards:

Item	Standard Value
Sulfur	0.20% (m/m), max

Remark:

Aviation fuel produced and sold domestically shall comply with these standards from July 1, 2020.

Article 7 Unless an enforcement date is separately designated, these standards shall take effect on the date of promulgation.

