
Current Status of China VIAQ Regulations

Yunshan Ge



Limit of Pollutants

Emission limits of volatile organic pollutants in vehicles

Unit: mg/m³

No.	Object	Concentration Requirement
1	苯 benzene	≤0.05
2	甲苯 toluene	≤1.00
3	二甲苯 xylene	≤1.00
4	乙烯 ethylbenzene	≤1.00
5	苯乙烯 styrene	≤0.26
6	甲醛 formaldehyde	≤0.10
7	乙醛 acetaldehyde	≤0.20
8	丙烯醛 acrolein	≤0.05

Concentration Ranking

- ▶ The comprehensive pollution index I is defined as:

$$I = \sum_{i=1}^9 I_i$$

- ▶ Where, $I_i = C_i/L_i$ represents the pollution index of the No. i pollutant, C_i represents the measured concentration of this pollutant, and L_i represents the corresponding limit
- ▶ For TVOC, the calculated reference value of L_i is 8.00.

Grade	Pollution Index I
A	$I < 1.0$
B	$1.0 \leq I < 5.0$
C	$I \geq 5.0$



Provisions on vehicle type test

- ▶ Type test vehicle is a new produced vehicle that is offline within 28 ± 5 days and whose trim has not been changed by the sellers and the users without authorization. Before test, no modifications that may affect the emission of volatile pollutants in the test vehicle shall be made by anyone, unless these measures are part of the manufacturing processes, or the transportation processes.
- ▶ Before formal experiment, the test vehicle may be subject to 24h static pretreatment at the ambient temperature of $25 \pm 5^{\circ}$ C. During the pretreatment, all the doors and windows of the vehicle are open, the engine and all electrical equipment in the vehicle are turned off, and all of the interior protective films for the purpose of transport protection are removed.
- ▶ The offline time (28 ± 5) days of vehicles specified in the Standard refers to the time for vehicle type test and production consistency test, and the vehicles with offline time of more than 33 days all shall meet the requirements of limits in the Standard.



Information disclosure

- ▶ The vehicle manufacturing enterprises or authorized agents shall formally report to the competent department of environmental protection for record, and make public the information about emission of volatile pollutants in the vehicles of the types for batch production according to the relevant provisions of the Ministry of Environmental Protection; the information filed and made public includes the measurement results of emission of volatile pollutants in vehicles and the information about configuration of main interior parts and components affecting volatile pollutants in vehicles.



Date of Standard implementation

- ▶ **Filing and information disclosure**

From the day when the Standard is released, the filing and information disclosure of emission of volatile organic pollutants in vehicles can be carried out according to the Standard, the information disclosure content, methods and related requirements are subject to the provisions on environmental information disclosure of newly produced vehicles.

- ▶ **Sales and registration**

From December 31, 2017 (open), all sold and registered vehicles must meet the requirements of the Standard.

- ▶ **Production consistency inspection**

For the vehicles whose information about emission of volatile organic compounds in vehicles has been made public according to the Standard, their production consistency inspection is to be carried out starting from the date of information disclosure.

