

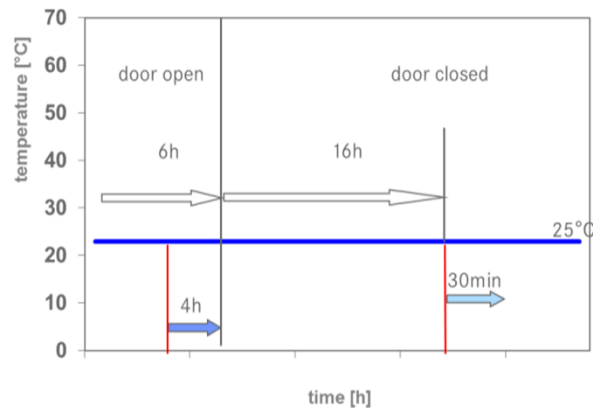


Vehicle Interior Air Quality

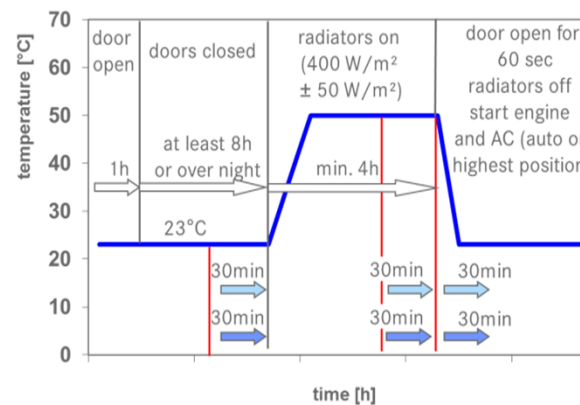
OICA position to GRPE Informal Working Group on VIAQ

Measurement methods for whole vehicles

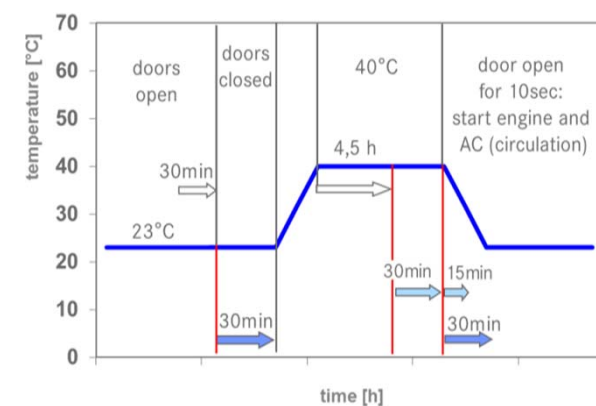
HJ/T 400--2007



ISO 12219-1



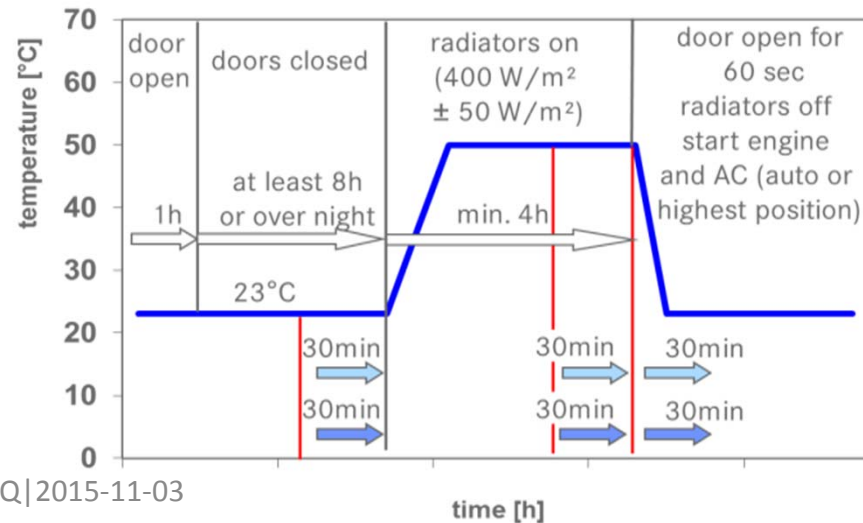
JAMA method



- Results of the different methods are not comparable.
- None of these methods can show the full variety of real driving situations.
- The driving part of ISO is as close as possible to these situations.

Measurement method for whole vehicles

- The OICA TF VIAQ believes that more progress can be made by harmonizing test procedures and requirements for vehicle manufacturers and suppliers
- A harmonized comprehensive method to measure the VOC content in vehicles worldwide is a common objective for all relevant parties involved in the topic of VOC analysis.
- This “world standard” has been defined in the ISO 12219-1.
- OICA supports the idea to overtake this ISO 12219-1 as an UNECE regulation.



KAMA Position on VIAQ Test Mode

We believe that ambient mode will be well functioning for the purpose of global harmonization on VIAQ test mode at this stage (2015-2017) taking into the following reasons.

(A) Work scope mandated by UN/ECE: The scope of the work is stated on the ToR of UN/ECE VIAQ IWG as below (GRPE-70-90-Rev.1, 3. Terms of reference 3.1.(e)).

3.1.(e) Draft a new recommendation (R.E.3 under the 1958 Agreement, S.R.1 under the 1998 Agreement or a new Mutual Resolution under both Agreements) concerning the protection of drivers and passengers from VOCs emitted by interior materials used in the construction of vehicles, including provisions and harmonized test procedures.

2.4 The IWG shall conduct comprehensive studies for the existing individual contents regarding management of interior air quality of vehicles.
It shall draft a new recommendation enabling more cost-effective management for the vehicle industry through unification of standards and measurement methods.

JAMA stance on KAMA proposal

For the reasons given below JAMA is opposed to the KAMA proposal

JAMA Stance on KAMA's Proposal

For the test method on determining volatile organic compounds (VOCs) and carbonyl compounds in vehicle cabin air, ISO 12219-1 has already been established according to the ISO "Global Relevance" principle of enabling the acquisition of accurate test data at reasonable cost anywhere in the world. Furthermore, this ISO Standard is the deliverable of in-depth discussions on volatile characteristics of these compounds by experts from vehicle manufacturing companies, testing institutes and universities across the world, taking into account the worst cases of vehicle used by general users. Accordingly JAMA believes it is essential for countries including Korea to utilize the existing, readily available ISO 12219-1 so that any additional spending of man-powers and costs for development of a new test method can be avoided.

For the reasons given below JAMA is opposed to the KAMA proposal made by Mr. Jee-Han Lee:

- 1) Justifications (i.e., scientific data) lack for narrowing down the test method only to the ambient temperature mode.

Although KAMA claims "existing national guidelines such as Chinese and Korean and industrial standard of ISO, all have the ambient mode in common", the detailed conditions, such as pre-conditioning method and soak time, differ in practice.

Since diffusion conditions of VOC differ, they are not common conditions.

- 2) Since the general scientific knowledge is that volatilization volume increases with

Test vehicle specification

- Vehicles designed and constructed for the carriage of passengers with no more than eight seats in addition to the driver's seat.
- The vehicles should be taken from series production
- Age of the vehicles: 28 (± 5) days after production end of assembly-line. Actually all OEMs are asked to check if this data is available for all.
- Treatment of the vehicles => to be done: define a guideline. Dr. Benedikte Roberz (Opel) will prepare a proposal by end of November. The test vehicle shall be stored and transported under conditions with no direct heating. Follow up 01/2016.
- Only new cars should be measured for compliance. Vehicles which were used by customers may be affected by various emissions caused by customers. Therefore limit values should only refer to new vehicles as produced and transported by the manufacturer.



Conclusions

- A harmonized test procedure is beneficial for all stakeholders.
- The most realistic test scenario is ISO 12219-1. It includes the needs for an realistic exposition, an ambient mode and also a parking mode with defined heating by sunsimulation.
OICA supports to take over the complete ISO 12219-1 method for the UNECE standard.
OICA is open to discuss changes of parameters within this method.
- Only new vehicles shall be tested. Vehicle definition and storage have to be defined. OICA will come up with a proposal at the next meeting in Jan/2016.