

FRAUNHOFER INSTITUTE FOR  
BUILDING PHYSICS IBP

# VEHICLE INTERIOR AIR QUALITY AND COMPONENT EMISSIONS





## **“OUR LONG-STANDING EXPERIENCE CAN BE EXTREMELY HELPFUL WHEN IT COMES TO IDENTIFYING SOURCES OF EMISSIONS.”**

Almost all materials release volatile substances into their surroundings. These emissions play a particularly important role in vehicle interiors. Therefore, we conduct research for our customers into the effects of emitted substances on humans and on the environment, and also offer advice.

### **Emission behavior of components (interior/exterior)**

- Determination of the emission potential of components and assemblies in special test facilities (SHED chamber)
- Comprehensive analytics portfolio – e.g. VOCs, formaldehyde, plasticizers, flame retardants and amines
- Evaluation of odors and identification of the source of unpleasant odors
- Evaluation of measured concentrations on the basis of guideline or limit values

### **Vehicle Interior Air Quality (VIAQ)**

- Simulation of different scenarios in parking and driving mode according to specifically defined boundary conditions (e.g. ISO 12219-1)
- Targeted application of undesirable substances to the vehicle environment, e.g. to determine the efficacy of cabin air filters
- Evaluation of odors and identification of the source of unpleasant odors

### **Evaporative emissions from drive systems**

- Assessment of the evaporative emission behavior of new generations of engines during their development (engine SHED)
- Determination of the impact of individual components, e.g. efficiency of HC traps in air intake systems
- Assessment of individual components or assemblies, especially with regard to fuel emissions (e.g. fuel lines or pressure sensors)

Our laboratory, test facilities and extensive range of analytics instruments are all located in one place. With our long-standing experience, we are able to analyze diverse issues comprehensively and without delay in order to develop sustainable solutions.

## Contact

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