

Valued Quality. Delivered.

# VOC Testing of Automotive Components

In the automotive industry materials used may not be as environmentally green as expected or as desired. In fact, a study by the Ecology Center has found concentrations of some toxic chemicals in automobile interiors were five to ten times higher than those found in homes and offices, thus making cars a significant contributor to overall indoor air pollution.

Intertek works with customers on VOC issues to minimize problems before they arise in the field, providing VOC and aldehyde-ketone emission testing for materials and products.





Intertek VOC tests service clients from the automotive, electronic devices, polymers and other industries.

#### The Challenge

It is difficult for a manufacturer to identify harmful VOC levels without extensive testing. With early detection, engineering judgments can be made and the usability of the materials can be determined.

## Common Sources of Automotive Interior VOC Emissions

- Glues
- Fabric
- Carpet
- Molded parts
- Electronic accessories
- Electronic control systems
- Lubricants on moving parts
- Manufacturing residues
- Exhaust system and engine compartment leaks

#### **Our Solutions**

Intertek Automotive Research's VOC testing is a natural extension of evaporative emission (SHED) testing services, which we have been performing for over 20 years. In both scenarios (SHED testing, and VOC testing), we have the ability to provide a detailed summary of the VOC analyses. Using instrumentation used to analyze samples collected in TD- tubes and DNPH cartridges (i.e., gas chromatograph with a fully integrated mass spectrometer detection system and thermal desorption sample system as well as a high performance liquid chromatograph with UV detection system), we are able to capture and indentify gaseous VOC constituents emitted from test samples.

Thermal direct vaporization analysis and direct analysis of gaseous headspace can also be performed as part of the VOC testing protocol. As the industry experts, we have the capability to conduct various industry VOC testing protocols including those from the following industries and automotive manufacturers:

For Interior Components

- German VDA
- Daimler Benz
- Volkswagen
- BMW
- Nissan
- Mazda
- Toyota
- Hyundai-Kia
- GM
- Ford
- Honda

#### The Intertek Advantage

Intertek Automotive Research is one of the largest independent automotive testing organizations in the world providing testing services since 1953 to the automotive and petrochemical industries. Based in San Antonio, Texas, our customer focused staff has a proven record of being very responsive to customer needs and special testing demands. Our customer base is worldwide and consists of the automotive OEM's, the heavy-duty engine OEM's, the OEM suppliers, and the fuel and lubricant companies.

Intertek is a leading provider of quality and safety solutions serving a wide range of industries around the world. From auditing and inspection, to testing, quality assurance and certification, Intertek people are dedicated to adding value to customers' products and processes, supporting their success in the global marketplace. Intertek has the expertise, resources and global reach to support its customers through its network of more than 1,000 laboratories and offices and 30,000 people in over 100 countries around the world.

### Intertek Automotive Research

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