

## Chemical composition of particles emitted from direct injection gasoline passenger cars

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### **Abstract**

Chemical compositions, such as elemental carbon (EC), organic carbon, elements, and ions, were measured in fine particles emitted from two latest gasoline direct injection (GDI) passenger cars (Japanese and German) and a Japanese gasoline port injection passenger car. EC was dominant for these cars. Contribution of engine oil was estimated to be 10–20% for the sum of measured all elements. The remaining fraction (80–90%) was likely originated from fuel.