

## **ENVIRONMENT**

### **In brief:**

- 'Clean Inside and Out' programme - Interior trim materials confirm to Oeko-Tex standards and are allergen-free.
- Electronic Climate Control (ECC) with IAQS and pollen filter.
- Interior Air Quality System (IAQS) ensures cleaner air inside than out.
- PremAir ozone system converts up to 75% of ground level ozone to Oxygen.
- Every all-new Volvo S40 supplied with an Environmental Product Information.
- Volvo Corporate Citizenship report: [www.volvocars.com/citizenship](http://www.volvocars.com/citizenship).

Volvo's commitment to the environment is reflected in its 'clean inside and out' programme.

An air filter prevents dust, pollen and exhaust particles reaching the interior, while the Interior Air Quality System ensures that the air inside the cabin is always cleaner than that outside. All the trim materials comply with Oeko-Tex standards to create a healthier, emissions-free interior, helping to reduce the risk of an allergic or asthmatic reaction.

Another pioneering environmental feature is Volvo's PremAir® system, which converts up to 75% of the ground level ozone passing through the radiator into oxygen. Several of the engines in the range already also meet the stringent EU 2005 emission requirements.

The S40 is built in one of the automotive world's cleanest factories, with 85 per cent of each car able to be recycled, while every new Volvo is backed by an Environmental Product Information (EPI) analysis. This is available at [www.volvocars.com/epi](http://www.volvocars.com/epi).

Volvo also produces an annual Corporate Citizenship report, which is available at [www.volvocars.com/citizenship](http://www.volvocars.com/citizenship).

### **In full:**

- 'Clean inside and out' environmental commitment

- Interior trim materials conform to Oeko-Tex standards and are allergen-free
- Cabin air filter removes dust, pollen and exhaust particles
- PremAir ozone system converts up to 75% of ground level ozone to oxygen
- Interior Air Quality System ensures cleaner air inside than out
- 85 per cent of the car can be recycled
- Several of the engines already meet stringent EU 2005 and ULEV (Ultra Low Emission Vehicle) emission requirements
- Each new Volvo has an Environmental Product Information (EPI) analysis available at [www.volvocars.com/epi](http://www.volvocars.com/epi).
- Volvo produces an annual Corporate Citizenship report: [www.volvocars.com/citizenship](http://www.volvocars.com/citizenship)

Volvo's 'Clean Inside and Out' programme represents a holistic approach to the environmental impact of the car. It focuses on health, resource utilisation and the ecological consequences of the production, use and disposal of the vehicle.

Like all Volvos the all-new Volvo S40 comes with an Environmental Product Information (EPI), which provides the car buyer with an overview of the car's environmental impact throughout its lifecycle. Volvo was the first car manufacturer in the world to introduce such a system and the information is available to the public at [www.volvocars.com/epi](http://www.volvocars.com/epi). In addition, Volvo's annual Corporate Citizenship report is available at [www.volvocars.com/citizenship](http://www.volvocars.com/citizenship).

The new Volvo S40 has been designed to be as environmentally friendly as possible. It is being built at the Volvo Car Corporation's Ghent factory in Belgium. Over 340 million Euros have been invested in the facilities and both the manufacturing processes and the substances used have been chosen to minimise the environmental impact of production. For example, the plant uses chromium-free body material pre-treatment, water-borne exterior paints and CFC-free materials.

The materials used in the manufacture of the new Volvo S40 have been equally carefully chosen. Eighty-five per cent by weight of the car can be recycled. The plastic components are marked to facilitate recycling and recycled felt and wood-fibre materials are used in some interior trim components.

The Volvo S40's on-board systems have also been optimised for environmental efficiency. For example, the catalytic converters are located close to the engine, the oxygen sensors (Lambdasond) are located both up and downstream of the catalyst and the Volvo S40 has a system for recovering evaporated fuel vapour (EVAP).

The five cylinder petrol engines fitted to the Volvo S40 have been developed to meet the next generation of California emissions regulations, some of the most stringent in the world. For example, the manifold and turbo unit in the T5 engine have been cast together in a high-alloy cast steel that has a high level of heat resistance (1050degrees). It requires less petrol to cool it so the engine can be run with a leaner mixture, promoting lower fuel consumption and exhaust emissions.

The radiators on the Volvo S40's five-cylinder engines are available with Volvo's PremAir® system, which is an industry first. PremAir® employs a catalytic coating on the radiator that converts up to 75% of the ground level ozone passing through it into Oxygen. This reduces harmful pollutants in the environment and makes a major contribution to local air quality.

Volvo's holistic approach does not rest with the vehicle's exhaust emissions. While most drivers are familiar with vehicle emissions and air quality issues, many do not know that the air inside their cars may also be harmful, or that the metals, textiles and leathers used in car interiors can emit volatile substances, which activate allergies and skin conditions. But not in a Volvo.

The interior of the Volvo S40 has been designed to comply with a strict international standard called Oeko-Tex, which ensures that all the materials used are hypoallergenic and free from hazardous substances. The components on the S40 that most frequently come into contact with the skin – the door handle, ignition key and safety belt locks - are also compliant with Oeko-Tex and allergen-free.

Every Volvo S40 benefits from Volvo's Interior Air Quality System (IAQS). This constantly monitors the cabin environment to minimise odours and pollutants entering. It uses an activated carbon filter to ensure that the air inside the car is always cleaner than that outside. The air-conditioning system also incorporates an air filter that prevents dust, pollen and exhaust gas particles entering the car.