

PRESS INFORMATION

The all-new Volvo S40:

Built according to Volvo's consistent environmental philosophy

- **Materials and technologies selected to minimise risk to health**
- **New engine technology gives environmental benefits**
- **Premair®**
- **Pollen filter is standard**
- **Interior Air Quality System a new option in the compact Volvo**
- **Environmental Product Declaration available from start**

Careful selection of materials and technologies

The all-new Volvo S40 is built in one of the most up-to-date production plants in the world. The manufacturing methods, as well as the materials and substances used in production, are selected so as to minimise the risk to health, both to production personnel and to people outside the plant.

Examples: Chromium-free body material pretreatment, water-borne exterior paints, CFC-free materials.

The on-board technologies are designed for the minimum possible effect on the surrounding environment in the form of low exhaust emission levels.

Examples: Aluminium low-friction engines, catalytic converters with three-way technology – located close to engine, oxygen sensor (Lambdasond) both upstream and downstream of catalytic converter, system for recovery of evaporated fuel vapour (EVAP).

As all Volvo cars, the all-new Volvo S40 is designed for a high recycling rate.

Examples: 85% by weight of the materials in the car can be recycled; plastic components are marked to facilitate recycling; recycled felt and wood-fibre materials are used in certain interior trim components.

Lower fuel consumption and lower emission levels

The new petrol engines are a further development of Volvo's low-friction engines. The manifold and turbo unit have been cast together in high-alloy cast steel that is particularly heat resistant (1050°). It therefore needs less cooling in the conventional way with petrol.

As a result, the engine can be run on a leaner fuel mixture, promoting lower fuel consumption and exhaust emissions, especially when driving at high speeds.

The new plastic inlet manifold also provides positive environmental effects. The plastic material's minimal heat conducting ability leads to cooler inlet air and thus more efficient combustion.

The lambda probes are of improved design, heating up faster and activating more quickly in cold starts. This promotes lower emissions.

The radiators for the Volvo S40's five-cylinder engines feature Volvo's PremAir® system, developed in cooperation with Engelhard Corporation.

PremAir® is a system that uses a catalytic coating on the radiator. It converts up to 75% of the ozone passing through the radiator into harmless oxygen.

The plans include a range of Bi-Fuel engines, that is to say engines that can be run on natural gas, biogas and petrol.

Will meet the next generation of emission regulations

The five-cylinder engines have been upgraded to meet the next generation of US and California emission regulations for this decade.

Those regulations are the toughest emission standards in the world and have led to new steps within emission development to handle the stringent HC, NO_x and durability requirements. Volvo offers this enhanced technology for tailpipe emissions worldwide on the new five-cylinder engines.

Cleaner inside than out

Like other Volvo cars, the all-new Volvo S40 has been developed to offer its passengers a clean and healthy cabin. A pollen filter is standard. In addition, Volvo's Interior Air Quality System (IAQS) is now available as an option in the compact model too. IAQS includes an activated carbon filter. It is an advanced air quality system, which

automatically purifies the incoming air of impurities and odours. IAQS makes the interior air cleaner than the air outside the car.

All materials used in the interior have been selected and tested to prevent allergies and other ailments.

Examples: Low PVC content in interior trim materials, chromium-free leather, nickel-free surface treatment, ÖKO-TEX-certified fabrics (the ÖKO-TEX Label is an international registered mark for testing of textiles and leather. The certification ensures that textiles and leather are hypoallergenic and free from hazardous substances).

Environmental Product Declaration available from start

Like all Volvo models, the all-new Volvo S40 comes with an environmental product declaration (EPD), something that Volvo was the first car manufacturer in the world to introduce. Volvo Car's EPD is based on a holistic approach with focus on health, resource utilisation and ecological consequences. It gives the car buyer an overview of the car's environmental impact throughout its lifetime and thus makes it easier to compare the eco-performance of Volvo's various models and engine alternatives.

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