



Technical Information

Legal Requirements For Brake Pads/Linings

ECE R90 Regulation

The ECE regulations include a list of internationally agreed, standardised technical rules for vehicles and spare parts and for the equipment used in vehicles.

Brake pads and their linings, as safety-related spare parts, belong to the group of vehicle components which require approval of each relevant individual national approving authority.

The introduction of the ECE R90 means that a new European regulation designed for the standardised testing and approval of replacement brake pads and linings is now in force.

This has been incorporated into EU legislation under the auspices of the EU regulation 71 / 320 / EU Version 98 / 12.

In Germany this regulation complements the "General Operating Licence", the German ABE, for replacement brake pads and linings in accordance with § 22 of the German Motor Vehicle Safety Standards and for new vehicles it supersedes this.

Area of Validity

In Germany, France and Spain, ECE R 90 approval is required for vehicles and trailers up to a permitted total weight of 3.5 t, which have been first registered after 31.03.2001.

In the UK the ruling applies for all vehicles registered for the first time from 01.01.1999 and weighing up to 3.5 t. For pads and linings fitted in older vehicles, the General Operating Licence (the German ABE) continues to suffice within the Federal Republic of Germany.

Since 01.04.2001, brake pads and linings governed by the ECE R 90 regulation have only been sold or fitted within the EU member states if they have the appropriate approval.

An integral part making up approval in line with the ECE R 90 regulation is the set of extensive vehicle tests and the physical testing procedures concerned with brake pads and linings.

Furthermore, the licence holder has to constantly check that regulations are observed within his production and, in line with DIN ISO 9000, such information has to be carefully documented.



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Criteria of the ECE Test

The following criteria are assessed during testing procedures.

Safety Checks

- Hot friction coefficient
- Average friction coefficient
- Static friction coefficient (parking brake)
- Speed friction coefficient

Physical Test Procedures

- Compressibility
- Shear strength
- Passage of heat

Identification

Identifying of released brake pads and linings is carried out by printing the information on the rear of the base plate (A).

Explanation of symbols:

1. Reference to the country where approval was granted.
2. Type of approval.
3. Number assigned by the authority.

