

EL507. Non-asbestos Transportation Parts

[EL507-1992/4/2001-107]



1. Scope

The criteria shall apply to brake lining, pad and clutch pacing as parts used for braking equipment of car and train.

2. Definitions

2.1

“Lining” refers to the friction material used for car brake system as a sort of medium needed to convert kinetic energy into the thermal energy.

2.2

“Asbestos lining” refers to the lining whose intensity is reinforced by inputting asbestos as fiber reinforcing agent. Several components are needed to make a lining, of which the most important one is fiber intensifier needed to maintain the intensity of lining.

2.3

“Non-asbestos lining” refers to the lining whose intensity is reinforced by inputting fiber intensifier except asbestos.

3. Certification Criteria

3.1 Environmental Criteria

3.1.1

Asbestos shall not be used on the wear part and insulating layer of brake lining, pad and clutch pacing in the manufacturing process.

3.1.2

Substances classified as carcinogenic ingredients in accordance with Industry Safety Public Health Act shall not be used on the wear part and insulating layer of brake lining, pad and clutch pacing in the manufacturing process.

3.1.3

Withdrawal plan for appropriate disposal shall be established and implemented.

3.2 Quality Criteria

3.2.1

Friction performance, bending and tolerance of measurement shall satisfy the quality criteria of KS R 4022 (Clutch pacing for car) and KS R 4024 (Brake lining and pad for car).

3.2.2

Brake lining and shoe product for railroad shall satisfy the quality criteria of demander (such as Korea National Railroad).

3.2.3

If Korean Industrial Standards are available as a national standard of the product in question, it should satisfy the quality or performance criteria of the standard in question. However, items related to "(1) Standard related to environment" are excluded.

3.2.4

If no Korean Industrial Standards are available as a national standard of the product in question, it should satisfy the quality and performance criteria according to the following sequence. However, the items related to "(1) Standard related to environment" are excluded. Also, if the E-Mark Certification Criteria Setting Committee determines that the applying criteria are not reasonable considering the characteristic of the product, it should satisfy the standards that were modified by the committee (test item, test method, standards, etc.).

3.2.4.1

National standards other than Korean Industrial Standards.

3.2.4.2

Overseas national standards or international standards regarding the product quality in question.

3.2.4.3

Standards of the organizations at home and abroad that are referred by the current E-mark target product and certification standard.

3.2.4.4

A private standard that is recognized as higher than the national standard in the industry of the product in question.

3.3 Information for Consumers

3.3.1

Ways of appropriate withdrawing and processing when disposing the product

3.3.2

Contact number of company related to collecting the waste product

4. Test Methods

Certification Criteria		Test and Verification Methods
Environmental Criteria	3.1.1~3.1.3	Verification of submitted documents
Quality Criteria	3.2.1	Test report by an accredited testing laboratory in accordance with KS R 4022 (clutch pacing for car), KS R 4024 (brake lining and pad for car) or certificate of equivalent
	3.2.2	Test report by the relevant accredited testing laboratory
	3.2.3~3.2.4	Test report by the relevant accredited testing laboratory or certificate of equivalent
Consumer Information		Verification of submitted documents

4.1 General Matters

4.1.1

One test sample shall be required for each applied product. However, if more than one test sample is needed, the former requirement may not be met.

4.1.2

Test samples shall be collected at random by a certification institute from products in market or those in storage at the production site.

4.1.3

The result of test shall be numerically set according to the KS Q 5002 (Statistical interpretation method of the data – Part 1: Statistical description of the data).

5. Reason for Certification

“Non-asbestos”

Common Criteria, Notice No. 2012-36, the Ministry of Environment

1. Eco-label products must follow the following provisions with regard to the proper treatment of environmental pollution substances, such as air and water wastes and noxious chemical substances emitted in the process of manufacturing or service operation.

A. When first applying for certification, the product manufacturer should observe the environment related laws and agreements pertaining to the region where the production factory or the place of service operation is located for a period of one year prior to the date of application. Any case of violation of the penalty clause will be verified by confirming documents involved during a period of one year to the date of application. Regarding any violation not related to the penalty clause, confirmation will be made on the completion of appropriate measures.

B. A person who has received a certification of eco-labeling shall observe the environment related laws and agreements pertaining to the region where the production factory or the place of service operation is located during the period of certification. However, regarding any violation besides a penalty, confirmation will be made on the completion of appropriate measures.

2. As a general rule, information for consumers shall be indicated on the surface of the product in such a way not to be easily erased. However, in case that indication on the surface of the product is impossible or undesirable, it can be indicated on the appropriate part such as product packaging, product guidebook and user's manual that consumers can recognize. However, the service information should be indicated inside and outside of the place of service operation. In case that indication inside and outside of the place of service operation is impossible or undesirable, it can be indicated on the appropriate part such as an agreement, letter of delivery, letter of guarantee, and PR materials that consumers can recognize.

3. In order to establish fair trade and to protect consumer, the applicant for eco-label and the holder of eco-label license shall observe the Act on the Fairness of

Indication and Advertisement with respect to the environmental aspects of the product.

4. For Various standards referred in the certification criteria by target product, the latest revised edition applies at the date of application, if not specified otherwise.

5. In applying the quality related criteria for each target product, if no standard is available that can be applied as the quality criteria, the president of Korea Environmental Industry & Technology Institute (KEITI) (hereafter referred to as "president of KEITI") may establish and operate the quality criteria for the product involved after review by a competent committee.