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**Testing method for abrasion
resistance of plastics by abrasive**

ICS 83.080.01

Descriptors : plastics, abrasion, abrasives, wear tests

Reference number : JIS K 7205 : 1995 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

Date of Establishment: 1974-04-01

Date of Revision: 1995-05-01

Date of Public Notice in Official Gazette: 1995-05-01

Investigated by: Japanese Industrial Standards Committee

Divisional Council on High Molecular
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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Testing method for abrasion resistance of plastics by abrasive

1 Scope This Japanese Industrial Standard specifies the testing method for the abrasion resistance of plastics, particularly in, by abrading test pieces with an abrasive.

Remarks 1 Normative references to this Standard are as follows :

JIS B 7502 *Micrometer callipers*

JIS B 7503 *Dial gauges*

JIS G 3101 *Rolled steels for general structure*

JIS K 6900 *Plastics—Vocabulary*

JIS K 7112 *Methods for determining the density and specific gravity of plastics*

JIS R 6001 *Bonded abrasive grain sizes*

JIS R 6111 *Artificial abrasives*

JIS Z 8401 *Rules for rounding off of numerical values*

2 The units given in { } in this Standard are based on the traditional units and are appended for informative reference.

2 Definitions In addition to the definitions given in JIS K 6900, the definitions given below apply to the principal terms used in this Standard.

2.1 abrasion Abrasion means the phenomenon in which a part of a material gradually drops off from its surface due to mechanical actions such as friction, grinding and erosion.

2.2 abrasion test The abrasion test means the measurement of the quantity of abrasion loss by abrading test pieces with a specified abrasion testing machine.

2.3 abrasive Abrasives means the materials of high hardness used for abrading plastic materials, which conform to JIS R 6111.

2.4 quantity of abrasion loss The quantity of abrasion loss is defined as the volume (mm^3) of the test piece fragments which have dropped off as a result of the abrasion test.

2.5 mass of abrasion loss The mass of abrasion loss is defined as the mass (mg) of test piece fragments which have dropped off as a result of the abrasion test.

3 Testing machine and accessories

3.1 Testing machine As shown in Fig. 1, the testing machine means a testing machine for abrading the test piece, hereafter referred to as “tester”, which consists of a horizontally rotating disc, a test piece mounting plate which intermittently move up and down while rotating parallel with the said disc, and an abrasive dropping device, whereby dropping a