

JIS

JAPANESE INDUSTRIAL STANDARD

Testing Methods for Optical
Properties of Plastics

JIS K 7105—1981

Translated and Published

by

Japanese Standards Association

**In the event of any doubt arising,
the original Standard in Japanese is to be final authority**

Errata for JIS (English edition) are printed in *Standardization Journal*, published monthly by the Japanese Standards Association.

Errata will be provided upon request, please contact:

**Business Department,
Japanese Standards Association**
4-1-24, Akasaka, Minato-ku,
Tokyo, JAPAN 107
TEL. 03-3583-8002
FAX. 03-3583-0462

Errata are also provided to subscribers of JIS (English edition) in *Monthly Information*.

Testing Methods for Optical Properties of Plastics K 7105-1981
(Reaffirmed: 1992)1. Scope

This Japanese Industrial Standard specifies the testing methods for optical properties of plastic materials(1).

Note (1) Plastic materials herein mean plastic materials in filmy and platy forms and of formed products.
In the case of the yellowness testing method, plastic materials shall also include those in the form of powder, pellets, filament and liquid.

2. Definitions

The definitions of the main terms used in this standard shall be as specified in JIS K 6900, JIS Z 8105, JIS Z 8113 and JIS Z 8120 and shall also be as specified below:

- (1) light receiving angle The angle formed between the optical axis of the light receiving system and the normal line to the specimen surface.
- (2) specular glossiness The ratio of reflected light flux to incident light flux in specular reflection.
- (3) transfer standard white surface The transfer standard white surface shall be a surface prepared by forming a barium sulfate powder, in which the spectral reflectance factor has been graduated by calibration. The transfer standard white surface shall be used for calibration of working standard white surfaces.
- (4) working standard white surface A durable white surface of known spectral reflectance factor, which is normally used as a standard for comparison in the measurement of spectral reflectance factor.
- (5) glare-proofness The degree in which glare is prevented.
- (6) yellowness The degree in which the hue removes from colorless or white toward yellow, which is expressed as a positive quantity. Consequently, when this is obtained by calculation as a negative value, it means that the hue transfers to the direction of blue.
- (7) yellowing factor A factor used for evaluation of the degree of deterioration of plastic materials exposed to an environment such as light, heat and the like, which is expressed by the difference between the initial yellowness and that obtained after exposure.
- (8) retrogressive reflection The phenomenon in which light is reflected toward the direction of illumination.
- (9) image clarity The property of the surface of a coating which reproduces the image of an object facing the coating surface.
- (10) distinctness of image The degree of distinctness of an image which is transmitted or reflected.