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UV curable resin and thermosetting resin — Continuous measurement method of shrinkage rate

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Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

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UV curable resin and thermosetting resin — Continuous measurement method of shrinkage rate

1 Scope

This Japanese Industrial Standard specifies a method for continuously measuring the curing state of UV curable resin and/or thermosetting resin to determine the curing shrinkage rate.

This Standard is applicable to resin compositions that are in a liquid state prior to curing. It is also applicable to resins cured under both UV curing and heat curing conditions.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS K 6900 Plastics — Vocabulary
JIS K 7100 Plastics — Standard atmospheres for conditioning and testing

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS K 6900**, and the following apply.

3.1

UV curable resin

resin such as acrylate resin and epoxy resin that is cured by exposure to UV radiation

3.2

thermosetting resin

resin such as acrylate resin and epoxy resin that is cured by heat

3.3

curing condition

condition for curing sample resins by UV irradiation and/or heating

3.4

curing shrinkage rate

rate of resin volume after curing to the resin volume before curing (rate of shrinkage due to resin curing)