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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18446-2009

Replacing GB/T 18446-2001

**Binders for paints and varnishes -- Determination of monomeric
diisocyanates in isocyanate resins**

色漆和清漆用漆基 异氰酸酯树脂中二异氰酸酯单体的测定

(English Translation)

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Foreword

This standard is equivalent to international standards ISO 10283:2007 "Paints and varnishes --- isocyanate resin diisocyanate single Determination of the body "(in English).

This standard is equivalent translation ISO 10283:2007.

For ease of use, this standard editorial changes as follows.

--- Use the "standard" instead of "this International Standard";

--- Delete international standards foreword.

This standard replaces GB/Determination of urethane prepolymers and coatings solution unreacted toluene T 18446-2001 "Gas Chromatography Diisocyanate (TDI) monomer. " this standard GB/T 18446-2001 and the main technical differences are as follows.

--- Increasing the range of the species can be determined diisocyanate monomer;

--- Using capillary column Determination diisocyanate monomer;

--- Using tetradecane or anthracene as an internal standard;

--- Improving the precision of the test method.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee paint pigment.

This standard was drafted. CNOOC Changzhou coating Chemical Research Institute.

1 Scope

This standard specifies the determination diisocyanate monomer content by gas chromatography method. This standard applies to different definitions of Chapter 3 Cyanate ester resin and a resin solution prepared from such (Preparation of a coating for the coating material and the like) of a toluene diisocyanate), six Methylene diisocyanate, isophorone

diisocyanate 2), diphenyl methane diisocyanate 3) and other types of diisocyanate content Determination.

1) The term "toluene diisocyanate" as used here and in the text refers to the 4-methyl-1,3-phenylene diisocyanate (2,4-toluene diisocyanate) and 2-methyl Phenylene-1,3-diisocyanate (2,6-toluene diisocyanate).

2) here and in the text, the term "isophorone diisocyanate" refers to 2-isocyanato-methyl -3,5,5-trimethyl-cyclohexyl isocyanate. This article fit when used at (I) and (II) to identify stereoisomers.

3) here and in the text, the term "diphenyl methane diisocyanate" refers to 4,4-diphenyl methane diisocyanate, 2,4-diphenylmethane diisocyanate Dioxane and 2,2-diphenyl methane diisocyanate.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 3186 Paints, varnishes and raw materials for paints and varnishes - Sampling (GB/T 3186-2006, ISO 15528:2000, IDT)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Containing isocyanate (NCO) an aromatic group, an aliphatic or alicyclic isocyanate prepared solvent or solvent-free synthesis Resin.

NOTE: The purpose of this standard, such as isocyanate resin comprising.

--- From any one particular diisocyanate, toluene diisocyanate (TDI), hexamethylene diisocyanate (HDI), isophorone diisocyanate (IPDI) or diphenyl methane diisocyanate (MDI) isocyanate resin, and the resin containing urethane and/or biuret and/or isocyanurate groups;

--- Isocyanate resin mixture prepared by the isocyanate resin listed above.

Principle 4

By gas chromatography, tetradecane or low volatile diisocyanate monomer with anthracene as the internal standard, the isocyanate resin diisocyanate Content of the ester monomer.

5 Reagents

Analysis, only identified as analytical reagents.

GB/T 18446-2009/ISO 10283:2007