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

*Liants pour peintures et vernis — Détermination des diisocyanates  
monomères dans les résines isocyanates*



Reference number  
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## Foreword

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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10283 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 10, *Test methods for binders for paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 10283:1997), in which the normative references clause has been updated.

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## Introduction

It is well-known fact that, due to the production methods used, all the commercial isocyanate resins named in this standard contain a certain amount of volatile monomeric isocyanates. This amount is generally less than 0,5 % relative to the resin as supplied. In view of the regulations relating to the handling of hazardous substances, it has become a matter of special concern that a generally accepted and applicable method of determination should be available. This standard is not intended to present a method suitable for the analytical determination of volatile isocyanates in any form and in any quantity. The standard specifies a method confined to determining the amounts of volatile isocyanates which occur in practice in isocyanate resins, namely about 0,1 % to 0,4 %. A further objective of the standard was to develop a method for determining with adequate accuracy as many as possible of the monomeric isocyanates which occur in isocyanate resins. It detects the principle isocyanates, namely toluene diisocyanate (TDI), hexamethylene diisocyanate (HDI), diphenylmethane diisocyanate (MDI) and isophorone diisocyanate (IPDI), and is a method considered by industry, authorities and institutes alike to be the state of the art.