



**International  
Standard**

**ISO 24829**

**Plastics — Polyether polyols and  
polymer polyols — Determination  
of aldehydes and ketones**

*Plastiques — Polyols de polyéther et polyols de polymère —  
Détermination des aldéhydes et des cétones*

**First edition  
2026-06**

Sample Document

get full document from [standards.iteh.ai](https://standards.iteh.ai)

# Sample Document

get full document from [standards.iteh.ai](https://standards.iteh.ai)



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>1</b>
<b>5 Reagents and materials</b> .....	<b>2</b>
<b>6 Apparatus</b> .....	<b>2</b>
<b>7 Procedure</b> .....	<b>4</b>
7.1 Preparation of calibration solutions.....	4
7.2 Preparation of sample.....	4
7.3 Preparation of calibration curve.....	4
7.4 Analysis of sample.....	5
<b>8 Calculation of results</b> .....	<b>6</b>
<b>9 Precision</b> .....	<b>6</b>
9.1 Repeatability.....	6
9.2 Recovery.....	6
<b>10 Performance criteria and quality assurance</b> .....	<b>7</b>
10.1 HPLC system performance.....	7
10.2 Sample loss.....	7
<b>11 Test report</b> .....	<b>7</b>
<b>Bibliography</b> .....	<b>8</b>

get full document from standards.iteh.ai

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at [www.iso.org/patents](http://www.iso.org/patents). ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 12, *Thermosetting materials*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

Polyether polyols and polymer polyols are the main raw materials of polyurethane, which are widely used in fields such as sofas, mattresses, car seats and headrests, adhesives, etc. In recent years, environmental policies have become increasingly strict, with the rapid development of the automobile industry, the demand of high-quality polyether and polymer polyols will increase greatly.

Automotive OEMs have limited requirements for formaldehyde, acetaldehyde and acrolein in the whole vehicle and interior parts and materials. Therefore, the manufacturers of vehicle interior require the test report of aldehydes and ketones content (generally including formaldehyde, acetaldehyde and acrolein) in polyether polyols. In order to meet the high requirements of environmental policies and the needs of sustainable development of the industry, it is necessary to establish a method for the determination of aldehydes and ketones content in polyether polyols and polymer polyols.

# Sample Document

get full document from [standards.iteh.ai](https://standards.iteh.ai)