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## **Diacetone alcohol and hexylene glycol for industrial use — Test for miscibility with water**

*Diacétone alcool et hexylène glycol à usage industriel — Essai de miscibilité à l'eau*

**First edition — 1974-04-01**

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## FOREWORD

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Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2518 was drawn up by Technical Committee ISO/TC 47, *Chemistry*, and circulated to the Member Bodies in September 1971.

It has been approved by the Member Bodies of the following countries :

Austria	Ireland	Spain
Belgium	Israel	Switzerland
Egypt, Arab Rep. of	Netherlands	United Kingdom
France	New Zealand	U.S.A.
Germany	Poland	U.S.S.R.
Hungary	Romania	
India	South Africa, Rep. of	

No Member Body expressed disapproval of the document.

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# Diacetone alcohol and hexylene glycol for industrial use — Test for miscibility with water

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a test for miscibility with water of diacetone alcohol (4-hydroxy-4-methyl-pentan-2-one)  $[\text{CH}_3\text{COCH}_2\text{C}(\text{OH})(\text{CH}_3)_2]$  and hexylene glycol (2-methylpentan-2,4-diol)  $[\text{CH}_3\text{CH}(\text{OH})\text{CH}_2\text{C}(\text{OH})(\text{CH}_3)_2]$  for industrial use.

## 2 PRINCIPLE

Addition of water to the test sample while shaking and examination for any opalescence or cloudiness produced.

## 3 APPARATUS

Ordinary laboratory apparatus.

## 4 PROCEDURE

4.1 Add gradually 90 ml of distilled water at 20 °C, swirling continuously, to 10 ml of the sample also at 20 °C.

4.2 Observe whether the mixture is homogeneous or whether it becomes opalescent or cloudy.

## 5 EXPRESSION OF RESULTS

Report if opalescence or cloudiness is observed, or whether the liquid has remained clear.

## 6 TEST REPORT

The test report shall include the following particulars :

- a) the reference of the method used;
- b) the results and the method of expression used;
- c) any unusual features noted during the determination;
- d) any operation not included in this International Standard or regarded as optional.

## ANNEX

This document is part of two series on methods of test concerning the following products :

**Diacetone alcohol (4-hydroxy-4-methylpentan-2-one) for industrial use**

ISO 2517 – *List of methods of test.*

ISO 2518 – *Test for miscibility with water.*

ISO 2887 – *Determination of acidity to phenolphthalein – Volumetric method.*

**Hexylene glycol (2-methylpentan-2,4-diol) for industrial use**

ISO 2518 – *Test for miscibility with water.*

ISO 2519 – *List of methods of test.*

ISO 2887 – *Determination of acidity to phenolphthalein – Volumetric method.*