

Designation: D 2030 - 97

# Standard Test Method for Water Solubility of Refined Pyridine<sup>1</sup>

This standard is issued under the fixed designation D 2030; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

- 1.1 This test method covers the determination of the solubility of refined pyridine in water.
- 1.2 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. For a specific hazard statement, see Section 6.

#### 2. Referenced Documents

2.1 ASTM Standards:

D 1193 Specification for Reagent Water<sup>2</sup>

D 3437 Practice for Sampling and Handling Liquid Cyclic Products<sup>3</sup>

2.2 Other Document:<sup>4</sup>

OSHA Regulations, 29, CFR, paragraphs 1910.1000 and 1910.1200

## 3. Summary of Test Method

3.1 Specific volumes of pyridine and water are mixed, allowed to stand for 30 min at room temperature, and the clarity of the solution noted.

# 4. Significance and Use

4.1 Water solubility is a qualitative detection of oil contaminants in pyridine.

# 5. Reagents

5.1 *Purity of Water*—Unless otherwise indicated, references to water shall be understood to mean reagent water conforming to Types I to IV of Specification D 1193.

#### 6. Hazards

6.1 Consult current OSHA regulations, supplier's Material Safety Data Sheets, and local regulations for all materials used in this test method.

## 7. Sampling and Handling

7.1 Sample the material in accordance with Practice D 3437.

# 8. Procedure

- 8.1 Measure 10 mL of pyridine specimen in a 100-mL mixing cylinder and dilute to 100 mL with water. Stopper and mix thoroughly by shaking. Let stand for 30 min at room temperature.
- 8.2 Fill another cylinder with 100 mL of water and compare the clarity of the specimen solution with that of the water.

#### 9. Report

9.1 Report the appearance of the specimen solution as "clear," "very slightly cloudy," "slightly cloudy," or "cloudy."

Note 1—If clear the specimen "passes"; if other than clear the specimen "fails."

#### 10. Precision and Bias

10.1 This test method for measuring water solubility of pyridine has no precision nor bias because the value of water solubility of pyridine is defined only in terms of this test method.

## 11. Keywords

11.1 pyridine; solubility; water solubility

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<sup>&</sup>lt;sup>1</sup> This test method is under the jurisdiction of ASTM Committee D16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.03 on Organic Nitrogen Compounds.

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<sup>&</sup>lt;sup>2</sup> Annual Book of ASTM Standards, Vol 11.01.

<sup>&</sup>lt;sup>3</sup> Annual Book of ASTM Standards, Vol 06.04.

<sup>&</sup>lt;sup>4</sup> Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.