



Designation: D 3264 – 97

Standard Specification for Industrial Grade Aniline¹

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1. Scope

1.1 This specification covers industrial grade aniline.

1.2 The following applies to all specified limits in this specification: for purposes of determining conformance with this specification, an observed value or a calculated value shall be rounded off “to the nearest unit” in the last right-hand digit used in expressing the specification limit in accordance with the rounding-off method of Practice E 29.

1.3 Consult current OSHA regulations, suppliers’ Material Safety Data Sheets, and local regulations for all materials used in this specification.

NOTE 1—The properties included in this specification are those required to characterize the above material. If additions are deemed necessary, these will be added when their inclusion becomes desirable and the necessary methods become available.

2. Referenced Documents

2.1 *ASTM Standards*:

D 1078 Test Method for Distillation Range of Volatile Organic Liquids²

D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)²

D 1493 Test Method for Solidification Point of Industrial Organic Chemicals²

D 3436 Practice for Sampling and Handling Aniline²

D 3505 Test Method for Density or Relative Density of Pure Liquid Chemicals²

D 4589 Test Method for Nitrobenzene in Aniline²

E 29 Practice for Using Significant Digit in Test Data to

Determine Conformance with Specifications³

E 203 Test Method for Water Using Karl Fischer Reagent⁴

2.2 *Other Document*:

OSHA Regulations, 29 CFR, paragraphs 1910.1000 and 1920.1200⁵

3. Properties

3.1 Industrial grade aniline shall conform to the following requirements:

Property	Specification	ASTM Test Method
Nitrobenzene, max, weight %	0.0002	D 4589
Water, max, weight %	0.05	E 203
Appearance ^A		
Color, max, PT/Co scale	100	D 1209
Distillation range, including the temperature, 184.2°C, at 101.3 kPa (760 mm Hg) pressure, max° C		
Total	1.0	D 1078
95 % (2.0 mL to 97.0 mL)	0.5	
Relative density, 20/4°C	1.020 to 1.024	D 3505
Solidification point, anhydrous basis, min, °C	–6.20	D 1493

^A Clear liquid free of sediment and haze when observed at 18.3 to 25.6°C (65 to 78°F).

NOTE 2—Aniline is light sensitive and will darken on exposure to light and air.

4. Sampling

4.1 Sample the material in accordance with Practice D 3436.

5. Keywords

5.1 aminobenzene; aniline; aniline oil; benzenamine; industrial grade; phenylamine

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² *Annual Book of ASTM Standards*, Vol 06.04.

³ *Annual Book of ASTM Standards*, Vol 14.02.

⁴ *Annual Book of ASTM Standards*, Vol 15.05.

⁵ Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.