



Designation: D5606 – 01 (Reapproved 2006)^{ε1}

Standard Specification for Toluene for Toluene Diisocyanate (TDI) Feedstock¹

This standard is issued under the fixed designation D5606; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

^{ε1} NOTE—Editorial changes were made to Footnote A of table in 3.1 and a Summary of Changes was added in January 2006.

1. Scope*

1.1 This specification covers toluene for toluene diisocyanate (TDI) feedstock.

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 E29.

1.3 Consult OSHA regulations and suppliers' material safety data sheets for all materials used in this specification.

1.4 The values stated in SI units are to be regarded as standard. The values given in parentheses are for information only.

2. Referenced Documents

2.1 ASTM Standards:²

D848 Test Method for Acid Wash Color of Industrial Aromatic Hydrocarbons

D1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)

D2360 Test Method for Trace Impurities in Monocyclic Aromatic Hydrocarbons by Gas Chromatography

D3437 Practice for Sampling and Handling Liquid Cyclic Products

D5386 Test Method for Color of Liquids Using Tristimulus Colorimetry

D6526 Test Method for Analysis of Toluene by Capillary Column Gas Chromatography

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

2.2 Other Document:

OSHA Regulations, 29 CFR, paragraphs 1910.1000 and 1910.1200³

3. Properties

3.1 Toluene for TDI feedstock shall conform to the following requirements:

Property	Specification	ASTM Test Method
Purity, min, wt %	99.9 ^A	D2360 or D6526
Acid wash color, max	pass with 2	D848
Benzene, max, mg/kg	300 ^A	D2360 or D6526
Nonaromatics, max, wt %	0.1 ^A	D2360 or D6526
Ethylbenzene, max, mg/kg	300 ^A	D2360 or D6526
Xylenes, max, mg/kg	500 ^A	D2360 or D6526
Appearance	^B	...
Color, max, Pt-Co scale	10	D1209 or D5386

^A If more than one method is listed, the producer and user should agree on the referee method.

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

4. Sampling

4.1 Sample the material in accordance with Practice D3437.

5. Keywords

5.1 impurities in toluene; toluene; toluene diisocyanate feedstock

³ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.

*A Summary of Changes section appears at the end of this standard.