

3050 Spruce Street, Saint Louis, MO 63103, USA

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## **Product Specification**

Product Name:

Dimethyl sulfoxide - meets EP testing specifications, meets USP testing specifications

**Product Number:** D1435 CAS Number: 67-68-5

MDL: MFCD00002089

Formula: C2H6OS Formula Weight: 78.13 g/mol O H₃C<sup>ŹŠ</sup>∖CH₃

TEST Specification

Identification A (USP)	Compares to Reference Standard
Infrared Spectroscopy	1
Identification B (USP)	Conforms
Chemical Test Produces Deep Violet, Crystalline Solid,	
Soluble in Chloroform, Yielding a Red Solution	
Acidity (USP)	≤ 5.0
mL of 0.01 N Sodium Hydroxide	
Water (by Karl Fischer) (USP)	≤ 0.1 %
UV Absorbance (USP)	Pass
No Absorption Maxima Between 270 nm and 350 nm	
UV Absorbance 275nm (USP)	≤ 0.20
UV Absorbance Ratio (USP)	≤ 0.65
A285/A275	
UV Absorbance Ratio (USP)	≤ 0.45
A295/A275	
Limit of Nonvol. Residue (USP)	≤ 0.01 %
Per 100 g Sample	
Related Compounds (USP)	≤ 0.1 %
Total Impurities	
Assay (USP)	≥ 99.9 %
Anhydrous Basis	
Refractive Index at 25℃ (USP)	1.4755 - 1.4775
Specific Gravity at 25℃ (USP)	1.095 - 1.101
Relative Density (EP)	1.100 - 1.104
Identification A	

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.





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## **Product Specification**

Product Name:

**TEST** 

Dimethyl sulfoxide - meets EP testing specifications, meets USP testing specifications

**Product Number:** D1435 CAS Number: 67-68-5

MFCD00002089 MDL:

Formula: C2H6OS Formula Weight: 78.13 g/mol

**Specification** 

Refractive Index at 20℃ (EP)	1.478 - 1.480
Identification B	
Infrared Spectrum (EP)	Compares
Identification C	
Compares with Spectrum of Dimethyl Sulfoxide CRS	
Nickel Chloride Test (EP)	Conforms
Identification D	
Acidity (EP)	≤ 5.0
mL of 0.01 M Sodium Hydroxide	
Water by Karl Fischer (EP)	≤ 0.2 %
Freezing Point (EP)	≥ 18.3 ℃
UV Absorbance (EP)	Pass
No Absorption Maximum Between 270 nm and 350 nm	
UV Absorbance 275nm (EP)	≤ 0.30
UV Absorbance 285nm (EP)	≤ 0.20
UV Absorbance 295nm (EP)	≤ 0.20
Related Substances (EP)	Pass
unspecified impurities: for each impurity,	
maximum 0.10% total impurities: maximum 0.15%	
Meets USP Testing Specifications	Current USP Specifications
Meets EP Testing Specifications	Current EP Specification

Specification: PRD.12.ZQ5.10000004539

Recommended Retest Period

2 Years

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