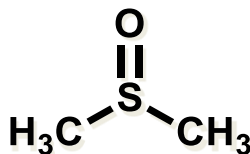


# DMSO-StG

## (Dimethyl Sulfoxide-Sterilized Grade)

Molecular Weight 78.13  
 CAS Registry Number 67-68-5  
 ENCS Number 2-1553  
 EINECS Number 200-664-3  
 TSCA registered  
 DSL registered



### Specification

USP Specification	
Identification (A) Infrared spectroscopy	Compares with reference sample.
Identification (B) Chemical Test	A deep violet, crystalline solid is obtained, and it is soluble in chloroform, yielding a red solution.
Specific gravity (25°C)	Between 1.095 and 1.101.
Refractive index (25°C)	Between 1.4755 and 1.4775.
Acidity	Not more than 5.0 mL of 0.01 N sodium hydroxide is consumed.
Water determination	Not more than 0.1%.
Ultraviolet absorbance	The spectrum is smooth with no absorption maxima. The absorbance at 275 nm is not more than 0.20. The absorbance ratio $A_{285}/A_{275}$ is not more than 0.65. The absorbance ratio $A_{295}/A_{275}$ is not more than 0.45.
Limit of nonvolatile residue	The weight of the residue does not exceed 0.01%.
Related compounds	Not more than 0.1% of total impurities is found.
Assay	Not less than 99.9 percent of C <sub>2</sub> H <sub>6</sub> OS, calculated on the anhydrous basis.

Ph. Eur. Specification	
First Identification (C) Infrared absorption	Compares with reference sample.
Second Identification (A) Relative density (20°C)	1.100 to 1.104.
Second Identification (B) Refractive index (20°C)	1.478 to 1.480.
Second Identification (D) Chemical Test	The solution is greenish-yellow. Heat in a water-bath at 50 °C. The colour changes to green or bluish-green. Cool. The colour changes to greenish-yellow.
Acidity	Not more than 5.0 mL of 0.01 M sodium hydroxide is required to produce a pink colour.
Freezing point	Minimum 18.3 °C.
Ultraviolet absorbance	No absorption maximum between 270 nm and 350 nm. The absorbance at 275nm : not more than 0.30. The absorbance at 285nm : not more than 0.20. The absorbance at 295nm : not more than 0.20.
Related substances	Unspecified impurities : for each impurity, maximum 0.10 %. Total : maximum 0.15 %.
Water	Maximum 0.2 %.

Revision Date : 2-Jun-2023

JP Specification	
Sterility Test	Sterilized
Bacterial Endotoxins Test	Not more than 0.25EU/mL.
Foreign Insoluble Matter Test for Injections	Perform the test according to Method 1
Insoluble Particulate Matter Test for Injections	Perform the test according to Method 1
Mycoplasma Testing*	Conforms

\*Under consideration

Toray Fine Chemicals Co., Ltd. guarantees that the product complies with the quality and specifications described above.

Toray Fine Chemicals Co., Ltd. makes no warranty with respect to fitness for use in the particular field or for any special purpose or use.