

# ANHYDROUS GRADE

WHEN MINIMAL WATER CONTENT IS CRITICAL

## DMSO



### Corporate Office

106 Galeria Blvd.  
Slidell, LA 70458  
(985) 649-5464

### Manufacturing and Technology Support

1880 Fairlawn Rd  
Tuscaloosa, AL USA 35401  
(205) 561-5023

**For samples** or further information related to dimethyl sulfoxide (DMSO), please contact:

Gaylord Chemical Company, LLC  
Customer Service  
(800) 426-6620

For more information about Gaylord Chemical Company, LLC please visit our website at:  
[www.GaylordChemical.com](http://www.GaylordChemical.com)

### DMSO Anhydrous Grade

is Dimethyl Sulfoxide with an extremely low moisture content, produced under exacting manufacturing conditions to insure dryness. This product eliminates the need for further solvent purification and processing.

*Choose DMSO Anhydrous Grade for:*

### Water-Sensitive Compound Synthesis.

Water present in DMSO can react with strong bases such as sodium hydride, butyllithium, and alkoxides. This can result in lower yields, and byproduct formation. DMSO Anhydrous Grade contains less than 50 ppm water, and minimizes losses to these side reactions.

### Water Synthesis Analytical Applications.

The potent solvent strength of DMSO makes it a valuable medium for the analysis and characterization of difficult-to-dissolve compounds and polymers. In certain analytical methods, water offers unwanted interference and can provide spurious information. This is especially true of IR Spectroscopy, wherein a small amount of water can obscure a large portion of the spectrum.

### Compound Library Management.

DMSO Anhydrous Grade may be used to store materials for later testing, and its low water levels minimize degradation that may occur through association with water and hydrolysis.



<b>Representative Test Methods</b>	<b>Values</b>
Assay, (% Min. by GLC)	99.9%
Water (PPM Max. by GC)	50
Titration Acid, (Max. meq/g)	0.001
Residue after Evaporation, (PPM Max.)	5
Color, (Max. APHA)	10

*This illustration does not constitute the specification. Specifications are available upon request*

## DMSO Anhydrous Grade at a Glance

### **Physical Properties Data**

Density, at 25°C (77°F)	1.0955
Boiling Point (atmos. pressure)	189°C
Viscosity @ 20°C (68°F)	2.14 cP
Refractive Index $n_D^{20}$ @ 20°C (68°F)	1.4785
Surface Tension @ 20°C (68°F)	43 dynes/cm
Specific Heat @ 25°C (77°F)	0.45 cal/g°C
Heat of Vaporization @ 25°C (77°F)	162 cal/g
Electrical Conductivity @ 20°C (68°F)	$3 \times 10^{-8}$ ohm/cm
Dielectric Constant @ 20°C (68°F)	48
Dipole Moment	4.3 D
Vapor Pressure @ 25°C (77°F)	0.6 mm Hg

### **Solubility**

Soluble in water, light alcohols and diethyl ether.

### **Regulatory**

CAS:67-68-5, EINECS:200-664-3

HMS and NFPA Hazard Ratings: Health -1, Flammability -1, Chemical Reactivity-0

### **Packaging**

Drums 500 lb HDPE



**Gaylord  
Chemical  
Company, L.L.C.**

106 Galeria Blvd., Slidell, LA 70458  
(985) 649-5464 (800) 426-6620  
[www.GaylordChemical.com](http://www.GaylordChemical.com)

The information in this bulletin is based on information available to us and on our observations and experiences. However, no warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or that any use will not infringe any patent. Each user must establish appropriate procedures for off-loading, handling, and use of the product(s). Since conditions for use are beyond our control, we will make no guarantee of results, and assume no liability for damages incurred by off-loading, handling, or use of the product(s). Nothing herein constitutes permission, or recommendation to practice any invention covered by any patent without license from the owner of the patent.