



Product Information

Metrizamide

Product Number **M 3383**
Storage Temperature -0 °C

Product Description

Molecular Formula: $C_{18}H_{22}I_3N_3O_8$
Molecular Weight: 789.1
CAS Number: 31112-62-6
Specific Rotation: +18° (c = 10% in 0.1 N HCl at 20 °C; equilibrated with respect to mutarotation)¹

Density, Refractive Index, Viscosity: Metrizamide in water at 20 °C

Conc. % (w/v)	Molarity	Refractive Index	Density (g/cm ³)	Viscosity (cP)
0	0.000	1.3330	0.9982	1.0
10	0.127	1.3483	1.0512	1.3
20	0.253	1.3646	1.1062	1.6
30	0.380	1.3809	1.1612	2.3
40	0.507	1.3971	1.2162	3.6
50	0.633	1.4133	1.2712	6.0
60	0.760	1.4295	1.3262	11.0
70	0.887	1.4458	1.3812	26.0
80	1.014	1.4620	1.4362	58

Metrizamide has been used for stabilizing against convection in sedimentation equilibrium.²

There is an equation for relating refractive index to density of metrizamide solutions.³

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Storage/Stability

Metrizamide has been reported to be stable in solution and has been used as a gradient medium over the pH range 2.5 to 12.5. Metrizamide solutions are susceptible to bacterial degradation. Therefore, solutions should be sterilized by filtration or they can be stored at -20 °C. Stock solutions, up to 90% (w/v), can be stored in the dark for very long periods of time.

Metrizamide is not autoclavable.⁴

References

1. The Merck Index, 12th ed., Entry# 6240.
2. Ralston, G.B., et al., The Use of Metrizamide for Stabilizing Against Convection in Sedimentation Equilibrium. *Anal. Biochem.*, **178**, 198-201 (1989).
3. Preparative Centrifugation: A Practical Approach, Rickwood, D., ed., IRL Press (Oxford, England: 1992), Appendix IV.
4. Preparative Centrifugation: A Practical Approach, Rickwood, D., ed., IRL Press (Oxford, England: 1992), p. 91.

HLD/RXR 9/02

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