

[Purchase](#) [Export](#) [Advanced search](#)

[Article outline](#) [Show full outline](#)

Abstract
Keywords
1. Introduction
2. Experimental section
3. Results and discussion
4. Conclusion
Acknowledgments
References

[Figures and tables](#)

[TABLE 1](#)
[TABLE 2](#)
[TABLE 3](#)
[TABLE 4](#)
[TABLE 5](#)
[TABLE 6](#)
[TABLE 7](#)

[TABLE 8](#)
[TABLE 9](#)

 The Journal of Chemical Thermodynamics
Volume 55, December 2012, Pages 130–137 

Derived thermodynamic properties for the (ethanol + decane) and (carbon dioxide + ethanol + decane) systems at high pressures

Héctor S. Zamora-López^a, Luis A. Galicia-Luna^a, Octavio Elizalde-Solis^b, Irma P. Hernández-Rosales^a, Edgar Méndez-Lango^a
[Show more](#)

<http://doi.org/10.1016/j.jct.2012.06.012> [Get rights and content](#)

Abstract
Volumetric properties for the binary (ethanol + decane) and ternary (ethanol + decane + carbon dioxide) systems are reported from (313 to 363) K and pressures up to 20 MPa. Compressed liquid densities of both systems were measured in oscillating U-tube densimeters. Binary interaction parameters for the (ethanol + decane) system were obtained by the UNIFAC method. Binary interaction parameters for the (ethanol + decane + carbon dioxide) system were obtained by the UNIQUAC method.

Recommended articles

Densities and derived thermodynamic properties o...
2012, The Journal of Chemical Thermodynamics [more](#)

Excess isobaric molar heat capacities and excess ...
2005, The Journal of Chemical Thermodynamics [more](#)

Vapor-liquid equilibrium for the ternary carbon dio...
2013, Fluid Phase Equilibria [more](#)

[View more articles »](#)

Citing articles (1)
Measurements and predictions of density and carb...
2013, Journal of Chemical Thermodynamics [more](#)

Related book content

Data for this Article
ThermoML IUPAC ThermoML
ThermoML Thermodynamic Properties

[Feedback](#)

[Purchase](#) [Export](#) [Advanced search](#)

[Article outline](#) [Show full outline](#)

Abstract
Keywords
1. Introduction
2. Experimental section
3. Results and discussion
4. Conclusion
Acknowledgments
References

[Figures and tables](#)

[TABLE 1](#)
[TABLE 2](#)
[TABLE 3](#)
[TABLE 4](#)
[TABLE 5](#)
[TABLE 6](#)
[TABLE 7](#)

[TABLE 8](#)
[TABLE 9](#)
[TABLE 10](#)
[TABLE 11](#)
[TABLE 12](#)

vibrating tube densimeter from (313 to 363) K. ► Excess molar volumes for (ethanol + decane) mixtures are positive. ► The presence of carbon dioxide in the (ethanol + decane) mixture causes negative excess molar volumes.

Keywords
Ethanol; Decane; Carbon dioxide; Density; Vibrating tube densimeter

Choose an option to locate/access this article:

Check if you have access through your login credentials or your institution	Purchase \$41.95	Get Full Text Elsewhere
Check access		Rent at DeepDyve

Corresponding author. Tel.: +52 55 5729 6000x55133; fax: +52 55 5586 2728.
Copyright © 2012 Elsevier Ltd. All rights reserved.

 About ScienceDirect Remote access Shopping cart
Contact and support Terms and conditions Privacy policy
Cookies are used by this site. For more information, visit the [cookies page](#).
Copyright © 2017 Elsevier B.V. or its licensors or contributors. ScienceDirect ® is a registered trademark of Elsevier B.V.
RELX Group™

Data for this Article
ThermoML IUPAC ThermoML
ThermoML Thermodynamic Properties