

	TRACE-PM 6.3 References	
	<i>Document #: 7368</i>	<i>Page 1 of 3</i>
	<i>Revision #: 2</i>	<i>Issued Date: 09/16/2020</i>
	<i>Document Manager: Cheryl Lozen</i>	<i>Approved By: Ryan Larrison</i>

6.3 References

[ASTM E1967-19 - Standard Test Method for the Automated Determination of Refractive Index of Glass Samples Using the Oil Immersion Method and a Phase Contrast Microscope](#)

[ASTM E2926-17 Standard Test Method for Forensic Comparison of Glass Using Micro X-ray Fluorescence \(u-XRF\) Spectrometry](#)

Ernst, T., et al. Signal-to-Noise Ratios in Forensic Glass Analysis by Micro X-ray Fluorescence Spectrometry, X-Ray Spectrometry, 2014, Vol. 43, pp 13-21

"GRIM 3 Instruction Manual and Guide." Foster + Freeman

Bommarito, C & Reeves, E "Elemental Analysis of Glass via Variable Pressure SEM-EDS", Presented at the American Academy of Forensic Sciences Meeting 2001, Seattle, WA.

"Collection, Handling, and Identification of Glass", Scientific Working Group for Materials Analysis (SWGMA), Forensic Science Communications, January 2005, Volume 7, Number 1.

"Elemental Analysis of Glass", Scientific Working Group for Materials Analysis (SWGMA), Forensic Science Communications, January 2005, Volume 7, Number 1.

International Union of Pure and Applied Chemistry, Nomenclature, symbols, units and their usage in spectrochemical analysis - II. Data interpretation, Pure and Applied Chemistry (1976) 45:99-103

"Introduction to Forensic Glass Examination", SWGMA, Forensic Science Communications, January 2005, Volume 7, Number 1.

Janssens, K.H., Adams, F.C. and Rindby, A., Microscopic X-Ray Fluorescence Analysis, J. Wiley, Chichester, 2000

Latkozcy, et al. Development and evaluation of a standard method for the quantitative determination of elements in float glass samples by LA-ICP-MS, Journal of Forensic Sciences (2005) 50:1327-1341.

Miller, E.T. "Forensic Glass Comparisons", in Forensic Science Handbook; R. Saferstein, ed, Prentice Hall: Englewood Cliffs, NJ, 2001.

Nayes, B., Umpierrez, S., Ryland, S., Barnett, C., Almirall, J.R. A comparison of laser ablation inductively coupled plasma mass spectrometry, micro X-ray fluorescence spectroscopy, and laser induced breakdown spectroscopy for the discrimination of automotive glass, Spectrochimica Acta, Part B (2008) 63:1145-1150.

Reeves, E. "Elemental Analysis of Glass via Variable Pressure SEM-EDS", A Thesis, Michigan State University, 2001

	TRACE-PM 6.3 References	
	<i>Document #: 7368</i>	<i>Page 2 of 3</i>
	<i>Revision #: 2</i>	<i>Issued Date: 09/16/2020</i>
	<i>Document Manager: Cheryl Lozen</i>	<i>Approved By: Ryan Larrison</i>

Ryland, S. "Micro-XRF for Forensic Glass Analysis", Presented at the Midwestern Forensic Resource Center/Midwestern Association of Forensic Scientists Advanced Trace Evidence Symposium, 2006, Ames, IA

Ryland, S. Sheet or container? — Forensic glass comparisons with an emphasis on source classification, *Journal of Forensic Sciences* (1986) 31:1314-1329.

Szymanski, DW, Patino L, Bommarito CR & Siegel JA "Trace Element Composition of Float Glass Fragments Determined by Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS)", Presented at the Midwestern Association of Forensic Scientists Meeting 2003, Columbus, OH and presented at the American Academy of Forensic Scientists Meeting 2004, Dallas, TX.

Evet, I.W., "The Interpretation of Refractive Index Measurements." *Forensic Science International*. 9: 209, 1977.

Glore, J., Collins, D., and Lundberg, R. "A Simple Computer Program for Fitting Forensic Glass Data."

Grabar, D.G. and Principe, A.H., "Identification of Glass Fragments by Measurement of Refractive Index and Dispersion." *J.F.S.S.*, 8: 54, 1963.

Greene, R.S. and Burd, D.Q., "Individualization of Glass Specimens." *J.F.S.S.* 10 (1), 1965.

Heideman, D.H., "Glass Comparison Using a Computerized Refractive Index Data Base." *J.F.S.S.* 20: 103, 1975.

Howden, C.R. , Dudley, R.J., and Smalldon, K.W. , "The Analysis of Small Glass Fragments Using Energy Dispersive X-ray Fluorescence Spectroscopy." *J.F.S.S.* p.99, 1978.

Hutchins, J.R. and Harrington, R.V. , "Glass: a Chemical, Physical, and Optical Study." *Corning Glass Works. From the Encyclopedia of Chemical Technology, 2nd Ed. pp.533-604, John Wiley and Co., 1966.*

Locke, J., "Improvements in the Use of Silicon Oils for the Determination of Glass Refractive Indices." *J.F.S.S.* 22: 257- 262, 1982.

Sanger, D,G, and Roopnarine, G. , "The Identification of Toughened Glass by Annealing." *Forensic Science International*. 20: 295-301, 1982.

MacDonell, H.L., "Identification of Glass Fragments." *J.F.S.S.* 19 (2), 1964.

Maloney, F.J.T., "Glass in the Modern World." 'Doubleday Science Series, 1968.

McCrone, W.C. , "Collaborative Study of the Microscopical Characterization of Glass Fragments." *J.A.O.A.C.* 56: 123, 1973.

"Microscopical Characterization of Glass Fragments." *J.A.O.A.C.*, 57 (3), 1974.

"Microscopical Characterization of Glass Fragments." *J.A.O.A.C.*, 55 (4),1972.

	TRACE-PM 6.3 References	
	<i>Document #: 7368</i>	<i>Page 3 of 3</i>
	<i>Revision #: 2</i>	<i>Issued Date: 09/16/2020</i>
	<i>Document Manager: Cheryl Lozen</i>	<i>Approved By: Ryan Larrison</i>

Miller, E.T. , "A Practical Method for the Comparisons of Mineral Wool Insulations in the Forensic Laboratory." J.A.O.A.C. 58, 1975.

"A Rapid Method for the Comparison of Glass Fragments." J.F.S.S. 10 (3), 1965.

Phillips, C.J. , "Glass, Its Industrial Applications." Chapter VI Chemical Properties of Glass. Reinhold Publishing Co.

Smalldon, K.W. and Brown, C. "The Discriminating Power of Density and Refractive Index for Window Glass. J.F.S.S. 13: 307, 1973.

Underhill, M. , "Multiple Refractive Index in Float Glass." J.F.S.S. 20: 169, 1980.

Von Bremen, U., "Shadow graphs of Bulbs, Bottles and Panes." J.F.S.S. p. 109, 1974.

"A Study of the Refractive Index Variations Within and Between Sealed Beam Headlights Using a Precise Method." J.F. S.S. 17: 424, 1972.

"Table of Refractive Indices of Automotive Glass of Foreign and Domestic Manufactures." from Toronto Lab.

"Tables of Chemical Compositions of Examples of Float Glass Manufactured in Various Countries of the World." from Toronto Lab.

Almirall, J., et al. Significance of Elemental Analysis from Trace Evidence (Working Group participant), 2012, U.S. Department of Justice Award Number 2009-DN-BX-K252, Document Number 242325

Trejos, T., et al. Cross-validation and evaluation of the performance of methods for the elemental analysis of forensic glass by μ -XRF, ICP-MS, and LA-ICP-MS (co-author), Analytical and Bioanalytical Chemistry, DOI 10.1007/s00216-013-6978-y (early view)

Trejos, T., et al. Forensic analysis of glass by μ -XRF, SN-ICP-MS, LA-ICP-MS and LA-ICP-OES: evaluation of the performance of different criteria for comparing elemental composition (co-author), Journal of Analytical Atomic Spectrometry, 2013, Vol. 28, pp 1270-1282

Ryland, S. Discrimination of Flat (Sheet) Glass Specimens Having Similar Refractive Indices Using Micro X-Ray Fluorescence Spectrometry, JASTEE, 2011, Vol. 2, pp 2-12

Dorn, H., et al. Unusual Variation of Thickness Within a Pane of Annealed Float Glass, Can. Soc. Forensic Sci. J., 2013, Vol. 46. No. 3, pp 166-169.