UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-0001

DATE: 24 October 2013

Product Identifier

SRM Number: 2242
SRM Name: Relative Intensity Correction Standard for Raman Spectroscopy: 532 nm Excitation

Under the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1200, this Standard Reference Material (SRM) is NOT classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified. There are no hazard pictograms, hazard statements or signal word associated with it. Safety Data Sheet information is not required. This document may be used in conjunction with your hazard communication program.

Exemption: 1910.1200 (c). This SRM is an Article, as the word is defined by OSHA, where *Article* means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of 1910.1200), and does not pose a physical hazard or health risk to employees.

Description: This SRM consists of an optical glass that emits a broadband luminescence spectrum when excited with 532 nm laser radiation. This SRM is intended for use in measurements over the range of 20 °C to 25 °C and with Raman systems that employ laser excitation at 532 nm. SRM 2242 is a manganese-doped (0.15 wt % MnO_2) borate matrix glass. There are two different formats of SRM 2242. One format of the SRM consists of a glass slide that is approximately 10.7 mm in width × 30.4 mm in length × 2.0 mm in thickness, with one surface optically polished and the opposite surface ground to a frosted finish using a 400 grit polish. The other format of the SRM consists of a glass slide that is approximately 10.7 mm in width × 30.4 mm in length × 1.6 mm in thickness, with both surfaces optically polished. The glass slides of either format are held in a 12.5 mm square cuvette-style optical mounts. This mount is designed for the typical 12.5 mm sampling accessories widely used in chemical spectroscopy (i.e., absorbance, fluorescence, etc).

Disposal: SRM 2242 and its components should be disposed of in accordance with local, state, and federal regulations.

Transport Information: This material is not regulated by the U.S. Department of Transportation (DOT) and/or International Air Transportation Association (IATA).

Disclaimer: This document was prepared carefully, using current references. Users of this SRM should ensure that this document and the corresponding Certificate of Analysis in their possession are current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srmmsds@nist.gov; or via the Internet at http://www.nist.gov/srm.