



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

DATE: 10 April 2015

Product Identifier

SRM Number: 2517a
SRM Name: High Resolution Wavelength Calibration Reference for 1510 nm – 1540 nm
Acetylene $^{12}\text{C}_2\text{H}_2$

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 is intended for wavelength calibration in the spectral region from 1510 nm to 1540 nm. SRM 2517a is a single-mode optical-fiber-coupled absorption cell containing acetylene ($^{12}\text{C}_2\text{H}_2$) gas at a pressure of 6.7 kPa (50 Torr). The absorption path length is 5 cm and the absorption lines are about 7 pm wide. The cell is packaged in a small instrument box (approximately 24 cm long x 12.5 cm wide x 9 cm high) with two FC/PC fiber connectors for the input and output of a user-supplied light source.

Disposal: SRM 2517a 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 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>.