



DATE: 05 February 2024

Product Identifier

SRM Number: 2973

SRM Name: Vitamin D Metabolites in Frozen Human Serum (High Level)

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. Biological hazards are exempted per 1910.1200(b)(6)(xii).

Description: This SRM is intended for use as an accuracy control in the critical evaluation of methods for determining the amount-of-substance concentration of vitamin D metabolites in human serum. This SRM can also be used as a quality assurance tool for assigning values to in-house control materials for these constituents. A unit of SRM 2973 consists of two vials of frozen serum at one concentration level of 25-hydroxyvitamin D [25(OH)D] and 24R,25-dihydroxyvitamin D₃ [24R,25(OH)₂D₃]. Measurement of 25(OH)D in serum, the sum of 25-hydroxyvitamin D₂ [25(OH)D₂] and 25-hydroxyvitamin D₃ [25(OH)D₃], is generally considered a reliable indicator of vitamin D status. Measurement of 24R,25(OH)₂D₃ in serum is considered as a catabolism marker and an indicator of kidney disease. Each vial of SRM 2973 contains approximately 1 mL of serum.

Additional Notes for Biomaterials: SRM 2973 IS INTENDED FOR RESEARCH USE. This is a human-source material. SRM 2973 is a Biosafety Level 2 material and should be handled according to applicable federal, state, and/or local regulations and according to policies and procedures of recipient's organization. The supplier has reported that each donor unit of plasma used in the preparation of this product was tested by FDA-licensed tests and found to be negative for human immunodeficiency virus (HIV), HIV-1 antigen, hepatitis B, surface antigen, and hepatitis C.

Disposal: SRM 2973 components and derived solutions 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 Transport Association (IATA).

Disclaimer: The NIST information in this document is specific to the NIST product and is believed to be correct, based upon our current knowledge. This document may not necessarily be all inclusive and should be used only as a guide. NIST does not guarantee the accuracy or completeness of this information. The only official source for specific values and uncertainties is the certificate or report.

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; e-mail srmmsds@nist.gov; or via the Internet at <https://www.nist.gov/srm>.