Spectrometer Grade



Overview

Our spectroscopy-grade chemicals are highly purified materials specifically designed for use in techniques such as HPLC, UV, and IR spectroscopy. These chemicals meet stringent purity standards to ensure accurate and reliable spectroscopic measurements. By using an optical spectrometer to measure light intensity across wavelengths, users can determine a sample's composition through precise, non-destructive analysis. Acetonitrile is a ubiquitous solvent in analytical laboratories, favored for its unique properties in both High-Performance Liquid Chromatography (HPLC) and UV-Vis spectroscopy. However, the performance differences between HPLC and spectroscopy grades of acetonitrile are a critical. The diffraction grating of a spectrometer partially determines the optical resolution that can be achieved by the spectrometer and also determines the wavelength range. Spectrophotometers typically focus on a specific.

Article Content

Optical spectrometer

Spectrometers may operate over a wide range of non-optical wavelengths, from gamma rays and X-rays into the far infrared. If the instrument is designed to

Spectroscopy

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Performance differences between HPLC and spectroscopy grade

The primary distinction between HPLC and spectroscopy grade acetonitrile lies in the stringency of their purification processes and the subsequent specifications for key impurities.

Spectrometers & Spectroscopy Equipment | Edmund

Whether you''re building a custom solution or seeking a turnkey system, our spectrometers support UV-VIS spectroscopy, NIR spectroscopy, fluorescence,

An Introduction to a Spectrometer: Diffraction Grating

Selecting the correct grating is an important factor to optimize a spectrometer to obtain the best spectral results for the application. Gratings will have an impact

Laboratory Spectrometers & Spectrophotometers – MSE Supplies

We offer a selection of UV/VIS spectrophotometers and luminometers that provide precise measurements for a variety of research applications, from analyzing light absorption in materials to

Certified Reference Materials (CRMs) for Spectrometer

Reference materials are important for analytical chemistry & clinical analysis for accurate calibration of spectrometers.

What do the different grades of chemicals mean?

In general, technical grade or laboratory grade are the lowest purity. ACS Reagent grade means that the chemical conforms to specifications defined by the

Spectrometers

Edmund Optics offers a wide variety of spectrometers, including spectrometers that have been optimized for Raman or fluorescence spectroscopy. Raman

A Guide to Solvent Grades

Spectrophotometric Grade (Spec-Grade)These solvents are of the highest purity (and most expensive) solvents used in spectrophotometric analysis, high

Material Grades Explained

Material Grades Explained Understanding chemical grades is crucial for ensuring purity and quality in pharmaceuticals, medical devices, and research.

Spectrometer resources

Focused 100% on OEM business, Ibsen Photonics is the preferred partner for leading industrial companies in volume supply of high performance

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Spectroscopy

Our product ranges include simple lab grade spectrometer to fully featured, fully automated imaging spectrometer with multiple gratings. A comprehensive range of accessories including spectroscopic

Spectrophotometry

Spectrophotometry is a branch of electromagnetic spectroscopy concerned with the quantitative measurement of the reflection or transmission properties of a

Portable X-ray Fluorescence Spectrometer | XRF Metal Analyzer

The EDX-3 Portable X-ray Spectrometer | XRF Metal Analyzer | Alloy Gold Tester can be used in the air to measure quickly, accurate, and non-destructively measure and identify various grades of stainless

Spectrophotometry Standards

Spectrophotometry Standards Author: John Barron, Technical Director & Leo Geary, Senior R&D Chemist, Reagecon Diagnostics Ltd., Shannon Free Zone, Shannon, County ...

Spectrometer

A spectrometer is any instrument used to view and analyze a range (or a spectrum) of a given characteristic for a substance (e.g., a range of mass-to-charge values

Optical spectrometer

Grating spectrometer schematic Internal structure of a grating spectrometer: Light comes from left side and diffracts on the upper middle reflective grating. The

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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