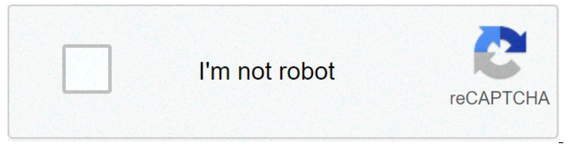

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Niosh manual of analytical methods 5th edition

The National Institute for Occupational Safety and Health (NIOSH) has released the 5th edition of the NIOSH Manual of Analytical Methods (NMAM). This latest edition of NMAM is the first electronic-only edition. The new electronic only format will still allow users to print copies of the methods as PDFs, but also allows for updates as new methods and guidance chapters are added. NMAM is a compilation of sampling and analytical methods for air, biological, surface and bulk samples that are evaluated according to established experimental protocols and performance criteria for use in workplace exposure monitoring. Workers may be at risk for inhalation or dermal exposures to chemicals or biological agents while on the job. These methods describe how to collect samples and analyze them against known standards. The results can indicate whether action is needed to reduce exposure. At the launch, the 5th edition will include 57 methods and 10 new or updated guidance chapters (covering topics such as sampling workplace aerosols, monitoring diesel exhaust, and measurement of fibers). This edition also adds six new biomonitoring methods. “We are continually keeping track of new developments in industrial hygiene and biomonitoring methods, as well as consensus standards,” said NIOSH Director John Howard. “The NIOSH Manual of Analytical Methods remains an invaluable global resource for occupational safety and health professionals and NIOSH is pleased to provide the newest edition to them.” NMAM is updated as new methods are developed and validated and as revised methods are evaluated and their performance verified. Efforts have focused on harmonization of NIOSH methods with available consensus standard methods. The methods published in NMAM are relied upon by authoritative bodies such as accrediting organizations and regulatory agencies. In 2015 NMAM was viewed half a million times and the individual methods were downloaded an average of 622 times each. To view the entire manual, visit: NIOSH is the federal agency that conducts research and makes recommendations for preventing work-related injuries, illnesses, and deaths. For more information about NIOSH visit . OIL & GAS Whether you are operating in the Upstream, Midstream, or Downstream segment of the Oil & Gas industry, our specialists are ready to help you with your needs and technical issues. We understand that you have high standards when it comes to both safety and profitability, and our services are designed to help our clients throughout the value chain maintain safe, efficient production while controlling costs. Adopting intelligent environmental practices is just as important from an overall operational perspective. We are ready to address these challenges holistically with our Green Line Services and Solutions dedicated to sustainability. With this wide-ranging suite of services, we can help all our Oil & Gas clients implement, measure, and achieve their environmental and sustainability objectives. NMAM is a collection of methods for sampling and analysis of contaminants in workplace air, surfaces, and in the blood and urine of workers who are occupationally exposed. These methods have been developed or adapted by NIOSH or its partners and have been evaluated according to established experimental protocols and performance criteria. NMAM also includes chapters on quality assurance, sampling, portable instrumentation, etc. NIOSH recommends that the best method available be used for making each measurement. Methods published by others, such as OSHAexternal icon, MSHAexternal icon, EPAexternal icon, ASTMexternal icon, ISOexternal icon or commercial suppliers of sampling and analytical equipment, may have advantages over NIOSH methods for a given sampling situation. (An Industrial Hygienist should determine the sampling protocol, considering analytical accuracy, cost, and optimum sample number.) Every method should undergo an initial evaluation to demonstrate performance. When a method is used in a laboratory that did not perform the initial evaluation, that laboratory should verify that comparable results can be obtained. NIOSH methods may need to be modified, and if modified, should be re-evaluated. Various OSHA regulationsexternal icon (e.g. benzene) mention performance criteria for evaluating whatever method is used. NIOSH has published methods developed in cooperating laboratories. These method performance have been evaluated using established experimental protocols. These methods were selected based upon priorities established in a joint NIOSH/AIHA survey of participating laboratories. Not all 4th edition NIOSH methods were brought into the NMAM 5th edition. This fact does not indicate that 4th edition NMAM methods are invalid or not supported. It is simply an indication of where our limited resources have focused. Unless marked otherwise, NMAM 4th edition methods are valid and supported. The Find a Method section below will only search for methods within the 5th edition. (Remember, this edition is a living document and is periodically updated as new or updated methods and chapters are ready for publication.) To search for methods within the NMAM 4th edition, click on the “NMAM 4th Edition” button under “NMAM Resources” and navigate the 4th edition as you had in the past. The National Institute of Occupational Safety and Health (NIOSH) has published their “Volatile Organic Compounds, C1 to C10, Canister Method 3900” in the NIOSH Manual of Analytical Methods (NMAM), Fifth Edition. In short, the method is a variant of United States (U.S.) Environmental Protection Agency (EPA) Method TO-15; however, with a focus on a particular subset of VOCs often encountered in the occupational setting at low ppmv concentrations. So, why am I bothering to blog about this when we already have countless TO-15 blogs? Well, it just so happens that this long-awaited document is the first validated method for capillary flow-controlled sampling into evacuated canisters. Ta da!!! Queue the Aura Personal Air Sampler! Oh what, you do not know the Restek Aura? We can fix that… A couple of years ago, we launched the Aura Personal Air Sampler kit (shown above) for the Environmental and Occupational Health/Industrial Hygiene market. The impetus was to provide a personal air sampling alternative, which overcomes some of the short-comings associated with active and passive (diffusive) solid sorbent sampling approaches. The heart of the Aura is a capillary flow controller, which will constantly sample at ~0.31 mL/min into a 400 mL canister over an 8-hour sampling duration. Think of the capillary flow controller like an elongated version of the critical orifice you may be familiar with in our soil gas and passive flow controllers. The biggest difference is that it achieves relatively constant flow rates (i.e.,