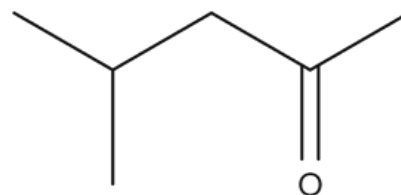


Precise and Fast Portable Gas Analysis

Accurate, reliable, and precise gas measurements serve multiple purposes. Gas measurements are vital for ensuring the safety of personnel and facilities. Accurate and reliable measurements enable the timely detection of toxic, flammable, or asphyxiating gases, allowing for immediate response and evacuation if necessary. By monitoring gas levels in real-time, potential hazards can be mitigated, and workers can be alerted to take appropriate measures to avoid accidents.

In industrial settings, accurate gas measurements help optimize processes by maintaining the ideal gas concentrations for efficient operation. This is crucial in industries such as chemical manufacturing, oil and gas, and pharmaceuticals, where precise gas control is necessary to ensure product quality, minimize waste, and maximize productivity.

Accurate and precise gas measurements play a vital role in environmental monitoring and protection. Monitoring emissions from industrial processes, vehicle exhausts, or natural sources helps assess air quality, identify pollutants, and develop strategies to reduce environmental impact. Reliable measurements are essential for tracking compliance with emission standards and implementing effective pollution control measures.



Solvent, extraction agent

Protecting Workers from Workplace Hazards with GC-UV INSCAN Series



Ensuring the health and safety of workers is of paramount importance in every industry. Occupational Health and Safety (OHS) regulations require employers to maintain safe working environments and protect employees from potential hazards. Air chemical analysis plays a crucial role in assessing and mitigating occupational exposure risks. This technical brochure delves into the significance of occupational health and safety, highlights the benefits of air chemical analysis, and emphasizes the importance of detecting specific chemical substances that pose risks to workers.

Understanding Occupational Health and Safety

Various industries present a wide range of potential hazards, including exposure to airborne chemical substances, which can adversely affect the health and well-being of employees. Compliance with Occupational Health and Safety regulations ensures a safe work environment and reduces the risk of occupational illnesses and injuries. By identifying potential hazards and implementing appropriate controls, employers can minimize the likelihood of accidents, exposure to hazardous substances, and other occupational health risks.

The Role of Air Chemical Analysis

Air chemical analysis enables the identification and quantification of hazardous chemical substances present in the workplace air, helping to assess the level of exposure and potential risks to workers.

Accurate analysis of air samples provides essential information on the concentration and composition of hazardous substances, aiding in the assessment of exposure levels. By identifying potential risks, air chemical analysis helps in implementing preventive measures, such as engineering controls, personal protective equipment (PPE), and ventilation systems. Regular air chemical analysis ensures ongoing compliance with occupational exposure limits and enables prompt corrective actions when necessary.

Specific Chemical Substances of Concern

Examples include Benzene, Toluene, Xylene, Formaldehyde, and Ethylbenzene, which are commonly found in industries such as construction, chemical manufacturing, and in shipping containers.

Fine particles, such as silica dust, asbestos fibers, and metal fumes, pose respiratory hazards in industries such as mining, construction, and manufacturing. Hazardous gases, including ammonia, hydrogen sulfide, chlorine, and carbon monoxide, can be encountered in various industrial settings, such as refineries, and manufacturing plants.

Safety & Security

Occupational Health and Safety is a critical aspect of any industry, focusing on safeguarding workers from workplace hazards. Air chemical analysis plays a pivotal role in identifying and assessing potential risks associated with airborne chemical substances. By detecting specific hazardous compounds and monitoring their concentrations, industries can proactively protect workers, comply with regulations, and foster a safe and healthy work environment. Embrace the power of air chemical analysis to prioritize Occupational Health and Safety and uphold the well-being of employees in every industrial sector.

Industry-Specific Chemical Compounds of Interest



Oil and Gas

Substances like LEL (lower explosive limit), methane (CH₄), and natural gas are prevalent in the oil and gas industry. They are monitored for safety purposes, leak detection, and ensuring the proper functioning of equipment and pipelines.

Chemical Manufacturing

Industries involved in chemical manufacturing deal with a wide range of gases. Carbon monoxide (CO), hydrogen chloride, hydrogen sulfide (H₂S), nitrogen (N₂), and various volatile organic compounds (VOCs) such as benzene, toluene, and styrene are commonly found. Monitoring these gases is essential for worker safety, process optimization, and compliance with environmental regulations.

Environmental Monitoring

Gases like ozone, nitrogen dioxide (NO₂), and carbon dioxide (CO₂) are of interest in environmental monitoring. They are measured to assess air quality, study pollution levels, and monitor greenhouse gas emissions.

Manufacturing and Industrial Processes

Many gases, including oxygen (O₂), hydrogen, ammonia (NH₃), and hydrogen sulfide (H₂S), are encountered in manufacturing and industrial processes. These gases are monitored to ensure worker safety, control process parameters, and prevent the release of harmful substances into the environment.

HVAC and Indoor Air Quality

Monitoring volatile organic compounds (VOCs), carbon dioxide (CO₂), and formaldehyde in indoor environments is important for maintaining air quality, especially in commercial buildings, schools, and residential spaces. These measurements help ensure occupant comfort and prevent potential health issues.



Experience comprehensive in situ measurements with real-time results. Say goodbye to the time-consuming process of taking samples and waiting for days or weeks for laboratory results. Our advanced gas analyzers provides the ability to detect unknown gases, giving you a complete picture of your environment.

Cheapest Gas Analyzers on the Market

- Experience real-time, in situ measurements with our advanced gas analyzer.
- Eliminate the wait for laboratory results by obtaining instant readings on the spot.
- Detect unknown gases and gain a comprehensive understanding of your environment.
- Enjoy complete portability, allowing you to relocate the analyzer wherever it's needed.
- Rely on its robust construction to withstand splashes, dust, and small bumps without worry.
- Simplify your monitoring needs with one compact package that caters to all industrial hygiene requirements.
- Streamline your workflow and save time with efficient, on-the-go gas measurements.
- Trust in the accuracy and reliability of our solution for precise and dependable results.
- Ensure the safety of your personnel and protect your production equipment effectively.

Gas Detected	Industries
LEL - Combustible Gas	Oil and gas, chemical manufacturing, mining, refineries, petrochemicals
Carbon Monoxide	Oil and gas, chemical manufacturing, mining, refineries, pharmaceuticals, automotive, combustion processes, laboratories
TVOC	Indoor air quality monitoring, chemical manufacturing, laboratories, building ventilation systems
Hydrogen	Oil and gas, chemical manufacturing, fuel cell technology, hydrogen production and storage facilities, laboratories
Natural Gas	Oil and gas, energy production, residential and commercial heating and cooking, power generation
Oxygen (O2)	Medical facilities, laboratories, metal fabrication, aerospace, diving, wastewater treatment, combustion processes
Ozone	Environmental monitoring, air quality control, water treatment, ozone generators
Hydrogen Sulfide (H2S)	Oil and gas, mining, wastewater treatment, pulp and paper, agriculture, refineries, petrochemicals, laboratories
Methane (CH4)	Oil and gas, biogas production, anaerobic digestion, landfills, agriculture, wastewater treatment, laboratories
Fluorine	Semiconductor manufacturing, chemical manufacturing, electronics industry, glass production, refrigeration systems
Hydrogen Chloride	Chemical manufacturing, metal refining, waste incineration, PVC production, laboratories
Nitrogen (N2)	Food and beverage packaging, pharmaceuticals, metal fabrication, electronics manufacturing, inerting systems, laboratories
Chlorine	Water treatment, chemical manufacturing, disinfection processes, swimming pools, pulp and paper industry
Ammonia Gas	Fertilizer production, refrigeration systems, chemical manufacturing, food processing, water treatment, laboratories
Oxynitride	Semiconductor manufacturing, electronics industry, optical coatings
CO2	Greenhouse gas monitoring, environmental research, indoor air quality monitoring, carbon capture and storage, fermentation processes, laboratories
CO	Automotive emissions control, combustion processes, industrial safety, laboratories
Ethylene Bromide	Pesticide manufacturing, fumigation, fire suppression systems
NH3	Agriculture (fertilizer application, livestock management), refrigeration systems, chemical manufacturing, laboratories
Formaldehyde	Building materials, furniture manufacturing, adhesives, textiles, laboratories, indoor air quality monitoring
Ethylene Oxide	Sterilization processes (hospitals, pharmaceuticals), medical equipment manufacturing, laboratory equipment sterilization, fumigation
Benzene	Petroleum refining, chemical manufacturing, industrial solvents, gasoline production
Toluene	Paints and coatings, chemical manufacturing, printing industry, adhesives, laboratories
Acetaldehyde	Chemical manufacturing, plastics production, resins, solvents, laboratories
Xylene	Chemical manufacturing, paints and coatings, printing industry, laboratory reagents
CH3Br (Methyl Bromide)	Fumigation, agriculture (pest control), soil sterilization, laboratory applications
Styrene	Plastics and rubber manufacturing, composite materials, packaging, insulation, laboratory reagents
VOC	Indoor air quality monitoring, chemical manufacturing, paint and coatings, printing industry, laboratories, emissions control
CH4	Biogas production, anaerobic digestion, landfill gas monitoring, natural gas industry, laboratories

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