



GAS DETECTION FOR LIFE APPLICATION BRIEF

NEW CAP OXYGEN MONITORING REQUIREMENT FOR LIQUID STORAGE AREAS

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The College of American Pathologists (CAP) establishes the accreditation program for medical laboratories that must maintain compliance with the Centers for Medicare and Medicaid Services regulations.

On August 22, 2018 CAP published the 2018 Checklist Edition that included an updated Laboratory General Checklist. Section GEN. 77550 Liquid Nitrogen Environmental Monitoring has been added to the inspection requirements. In areas where liquid nitrogen is used, there are oxygen sensors with a low oxygen alarm mounted in an appropriate location and sufficient airflow to prevent asphyxiation.

When liquid nitrogen is dispensed, it releases nitrogen gas and displaces oxygen. Whether from a leak or routing procedures, this can create a potential occupational hazard for an oxygen deficient or hazardous atmosphere. The Occupational Safety and Health Administration (OSHA) states that a hazardous atmosphere may include one where the oxygen concentration is below 19.5% or above 23.5%



NEW CAP OXYGEN MONITORING REQUIREMENT FOR LIQUID STORAGE AREAS

OX-600

STAND ALONE OXYGEN DEFICIENCY MONITOR



NORMAL



WARNING



ALARM



RKI Instruments' Model OX-600 Stand Alone Oxygen Deficiency Monitor is a cost-effective, low-profile oxygen sensor with a unique Tri-color display which changes color as oxygen levels reach each alarm level.

The OX-600 has features to accommodate nearly any laboratory application. With three power choices (115VAC, 24 VDC, or 2 AA Alkaline batteries that operate up to 1 year) and optional remote mount sensor (3-20 meters) which allows the display unit to be mounted outside the nitrogen storage area.

The OX-600 uses a fast-responding low-cost, plug-in style galvanic cell sensor. This long-life sensor is field replaceable with no special tools required. The sensor has an oxygen detection range of 0-25% with 0.1% increments and includes a pressure compensation feature to avoid false alarms caused by atmospheric pressure changes..

Being aware of oxygen deficiency in the presence of liquid nitrogen is not only a new requirement for CAP Accreditation, it can save lives.

Resources:

[OX-600 Website](#)
[Datasheet](#)