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PureAire Gas Detection February Newsletter

Food Processing and Manufacturing

What is liquid nitrogen, and why is it used in food processing? Liquid nitrogen is nitrogen in a liquid state; it is extremely cold. Food processors utilize the intense cooling qualities of liquid nitrogen in many applications, including grinding, mixing, coating, freezing, and packaging foods. Liquid nitrogen's very low temperature inhibits microbial growth that can lead to food spoilage and helps maintain the foods' original freshness, flavor, and textures.

Please continue reading our newsletter to learn more about how liquid nitrogen is used in food processing, and how PureAire's line of oxygen deficiency monitors can help keep food production personnel safe when working with liquid nitrogen.

Visit our Website

Safe Use of Liquid Nitrogen in Food Processing Plants

In December 2020, two employees working at a Vernon, California food processing plant lost consciousness and died following an apparent liquid nitrogen leak. On January 28, 2021, there were several fatalities, and many other employees became sick, after being exposed to nitrogen gas when a liquid nitrogen line ruptured at a food processing plant in Gainesville, Georgia.

According to the Occupational Safety and Health Administration (OSHA), a total of fourteen workers died from asphyxiation linked to nitrogen gas in twelve separate workplace accidents recorded between 2012 and 2020, and 2021 is already off to a sad start. Tragically, these accidents illustrate the dangers of working with liquid nitrogen.

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Industry Spotlight - Food & Beverage

The food and beverage industries rely on carbon dioxide and nitrogen gas for a range of uses. CO2 carbonates beverages in bars, fast-food establishments, and restaurants. In the food service industry, nitrogen gas helps chill food to create everything from ice cream to modernist cuisine. Nitrogen gas also assists in the food preservation process by removing oxygen from the environment, extending the shelf life, and decreasing the likelihood of spoilage.

The easiest way to protect employee safety is to install oxygen monitors or dual O2/CO2 monitors. These detect gas leaks by tracking ambient oxygen levels, then sound an alarm to warn staff. PureAire's offers some of the longest-lasting monitors in the business, capable of lasting 10+ years with no maintenance.

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Featured Product

Our featured product is our Water-Resistant Oxygen Monitor, aself-contained oxygen deficiency system that is suitable for remote sampling of confined spaces that require daily wash-downs.

- Long-life 10 + Years average sensor life
- No Calibration Sensor
- IP67 Water-Resistant Enclosure
- Two-Alarm Relays for 19.5% and 18.0%
- No Maintenance Required
- 3 Year Warranty
- Digital Display, 4-20mA Analog Output
- No drift due to thunderstorms or barometric pressure changes
- Wall mounting brackets
- Built-in Flow Sample Pump
- UL, C UL and CE Approvals

Additional Information

PureAire Google Reviews

"Our company SunBeam Laboratories manufactures hand sanitizer. We have a need for continuous monitoring of our ethanol vapor levels in our manufacturing facility. We decided to purchase an Ethanol Gas Monitor for Hand Sanitizer Production from PureAire. We added a high level alarm to the PureAire

system to notify employees of a potential dangerous situation. The instructions that came with the unit were very clear. To date the system has performed as advertised." - Danny C.

"The PureAire oxygen monitor is reliable and easy to install. The company was recommended by our liquid nitrogen vendor. I found the Regional Sales Manager, David Austin, to be extremely quick to respond to my queries and installation questions." - Sepideh H.

"This is the second O2 monitor purchased from PureAire. Systems and customer service is always great." - Richard R.