NITROGREN USE FOR TELONE™ BY TELEOS

THIS SHEET DOES NOT REPLACE INFORMATION FOUND IN THE TELONE™ II BY TELEOS LABEL, SDS, OR STORAGE AND HANDLING GUIDE.

OVERVIEW

Nitrogen gas is critical in TELONE™ by Teleos soil fumigant applications as it provides pressure for product transfer, maintains system integrity, and ensures safe and efficient handling. At bulk storage sites, nitrogen is often stored in high-capacity bulk tanks to support large-scale operations. Given its high-pressure nature, proper handling, storage, and operational procedures are essential for safety and efficiency.

THE ROLE OF NITROGREN IN TELONE™ APPLICATIONS

- Nitrogen is used to pressurize bulk tanks and field application tanks to facilitate controlled TELONE™ flow. Unlike compressed air, nitrogen does not introduce moisture into the system, thereby reducing the risk of TELONE™ hydrolysis and corrosion. Maintaining a steady nitrogen pressure ensures a consistent product flow during fumigation, preventing application issues.

BULK NITROGEN STORAGE AT TELONE™ BULK SITES

- High-pressure cylinders are commonly used for portable nitrogen supply, while bulk liquid nitrogen tanks with vaporizers may be installed at large-scale facilities to generate gaseous nitrogen as needed.
- All nitrogen tanks or cylinders must be stored upright and securely anchored in a shaded, well-ventilated area away from heat sources and ignition points. Storage areas should be separated from TELONE™ bulk tanks to prevent cross-contamination or operational conflicts. Labels must be clearly visible, and regular inspections should be conducted to identify leaks or damage.
- Regulatory compliance requires adherence to OSHA and local compressed gas regulations. Only trained personnel should handle nitrogen systems, and routine inspections must be documented.

USING NITROGEN FOR TELONE TRANSFER AND APPLICATION

- Before connecting nitrogen to a TELONE™ bulk system, all hoses, regulators, and fittings must be inspected for leaks, wear, or contamination. Only nitrogen-rated regulators with a check valve should be used to prevent contamination. All connections must be tightened appropriately before opening the nitrogen valve. Nitrogen must be introduced gradually to prevent pressure shocks that could damage TELONE™ transfer lines.
- During operation, nitrogen pressure must remain stable and within the system's recommended limits. Bulk site tank pressurization typically ranges and will vary depending on bulk tank vent set pressures, while application systems should follow recommended pressures set by training operators to ensure safe product flow. All connections must be monitored for leaks, and nitrogen should be shut off once the transfer is complete to avoid over-pressurization.

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SAFETY PROTOCOLS FOR BULK NITROGEN AND CYLINDERS

- Nitrogen will displace oxygen. Never enter a bulk tank that has been under nitrogen pressure without first verifying air quality. Avoid standing near a manway or any other openings when depressurizing systems.
- In the event of a nitrogen leak, the affected cylinder should be moved to a well-ventilated area, and site personnel should be notified immediately. Over-pressurization must be addressed by slowly releasing excess pressure without exceeding equipment ratings. While nitrogen is non-flammable, rapid release in enclosed spaces can create an asphyxiation hazard, requiring proper ventilation and emergency procedures.
- Bulk nitrogen tanks should only be filled by certified suppliers and monitored regularly for pressure and integrity. When converting liquid nitrogen to gas, vaporizers must be inspected for proper operation. Only trained personnel should operate bulk nitrogen systems to minimize the risk of accidental exposure or over-pressurization.
- High-pressure cylinders must be secured upright with straps or chains and transported with proper lifting equipment. Protective valve caps should remain in place when the cylinder is not in use to prevent damage.

KEY TAKEAWAYS

- Nitrogen is essential for safe and efficient TELONE™ transfer, providing stable pressure and preventing moisture contamination. Bulk nitrogen storage requires careful handling, proper ventilation, and clear separation from TELONE™ tanks.
- Only nitrogen-rated regulators and fittings should be used to maintain system integrity. Maintaining appropriate pressure settings ensures even TELONE™ application, reducing operational risks. Proper training and emergency preparedness are necessary to prevent leaks, over-pressurization, and asphyxiation hazards.