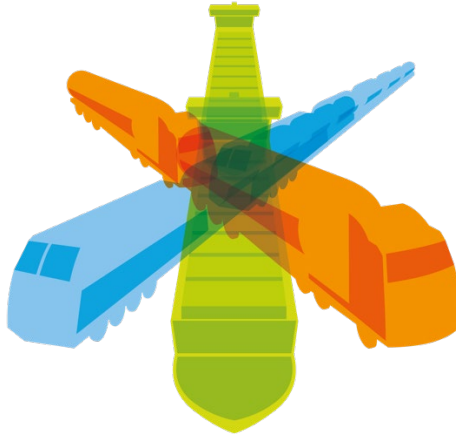




Working with nitrogen

Procedure

Nitrogen (N₂) is a colourless and odourless gas that is present all around us. Approximately 78% of the air consists of nitrogen.

Nitrogen gas is used in bulk transport to safeguard the quality of food products. Nitrogen is inert, which means that it does not react chemically with the product. This preserves freshness and prevents oxidation and the growth of aerobic bacteria, which require oxygen.

Nitrogen gas is a heavy gas that displaces oxygen. For this reason, it remains in the tank. If the use of nitrogen is not indicated, this can create serious risks for everyone involved in loading, unloading, cleaning or repairing the load unit.

Inhalation can lead to unconsciousness and, in the worst case, death.

Be extra alert at loading and unloading locations

Although we require our business partners to inform us about the use of nitrogen and take the necessary precautions, this does not always happen in practice.

Always remain alert. Never inhale compressed air. Consult the customer if you have doubts and report the situation immediately. Your planner must make the necessary preparations, including coordinating with the customer, updating the information in our system and adding a notification to the cleaning booking.



Nitrogen during loading and unloading

After loading, a nitrogen blanket is effectively applied over the product through the air line.

This nitrogen blanket is usually applied by an employee at the loading location, but the driver may sometimes be required to do this. Planning has an established procedure for this task. If you are performing it for the first time, on-the-job training may be provided in addition to instructions on the procedure.



Nitrogen is also used as an aid during unloading under pressure. In Dry Bulk, nitrogen is also used to prevent static electricity when unloading products such as plastics.

Use nitrogen seals and warning stickers

If you observe that nitrogen is being used during loading or unloading, always take the necessary precautions to warn others and prevent critical situations. The precautions consist of applying:

- a nitrogen seal/sticker to the customs covers
- a nitrogen seal/sticker at the outlet
- a nitrogen seal to the air line and/or ground controls



Write the date and time on the sticker. Clean the surface thoroughly first to ensure that the sticker adheres properly.



The loading/unloading location is responsible for providing the correct stickers and seals. However, it is advisable to carry them yourself or collect them en route before visiting the customer.

Remove the stickers after cleaning

To prevent confusion, the warning stickers must be removed after cleaning.