



# Leaks

A leak or spill is a situation where product is spilled. This can occur during or after loading/unloading. The causes are diverse and, in most cases, human error. We aim to prevent this whenever possible.

### Common causes of leaks are:

- Incorrect or damaged gaskets.
- Incorrect placement of gaskets in manholes, pumps, or outlets.
- Ending product flow too late.
- The loading boom or bag is not properly inserted in the manhole.
- The loading bellow or hose is not completely empty, causing product to spill when switching or disconnecting.
- The outlet, bottom valves, manhole covers, or agitator bottom are not closed properly.
- Sample tap is not closed properly.
- Vent valve is left open during pressure build-up.
- Forgetting to connect dust bag during blowing over of product.
- Air duct left open.
- Hose not connected properly.
- Hose not emptied after unloading (resulting in six metres of hose containing residual product).
- Failing to place the blind caps on the hoses after unloading.
- Failure to check and/or tighten bolts and blind caps after loading.

## How to prevent leaks/spills:

- Take your time. A driver who takes the time for a thorough check reduces the chance of mistakes and maintains their clear thinking.
- Ensure a good routine for every job, so no steps are forgotten or skipped.
- Check the couplings and hoses for cleanliness, the condition of gaskets, and damages.
- Check the container for leaks and damages when mounting.
- Check the load unit for damages and leaks when coupling and uncoupling.



## Cleaning

- When preparing for cleaning, check all gaskets for their presence, correct placement, and damage. Replace gaskets when in doubt.
- After cleaning, ensure that all entrances to the loading unit are properly closed and sealed.



## Loading

- Ensure that when product enters, air is let out.
- Check that all possible access points not used for loading, are closed. Use the appropriate tools for this.
- Perform a pressure test if necessary (in consultation with your planner).
- With liquid tank(containers), pay extra attention to closing the air duct on top of the tank.
- When loading a single chamber tank with several manhole covers, always check that the manhole covers you are not using are closed properly.
- Compare the tank capacity with the amount of product to be loaded.

## Unloading

- Ensure that when product is unloaded, air enters.
- Ensure you have enough space for working.
- Run through everything in your head before starting the unloading process: this also allows for some peace of mind.
- Make sure the customer is ready to start unloading. Verify with them if needed.
- Establish the maximum unloading pressure. The customer determines this. Verify this with them if needed.
- Establish the **MAWP (Maximum Allowed Working Pressure)** of the loading unit.
- Make sure no pressure builds up while the compressor is turned on. You are not able to intervene immediately then.
- Stay in close proximity to your load unit throughout the unloading process.
- Monitor the pressure gauge, if pressure does not rise, there may be a leak (or the pressure gauge is defective).
- Listen and watch the side of the cargo unit during pressure build-up. A leak can then often be better observed.



### In case of a leak:

- immediately turn off the compressor or cut off the customer's air supply.
- release all pressure from the tank and only then fix the leak; a gasket is damaged or out of place.
- never try to tighten anything while the system is still under pressure. This is extremely dangerous should something break off unexpectedly.



- never simply open the unloading tap entirely. instead, open it carefully and check for leaks at all connections of hoses and couplings.
- always report a leak to your planner and to the site coordinator. Take a photo to provide your planner with visuals on the situation.
- always clean up spills, do this in consultation. (also remember to clean your equipment so that nothing spills on the way).
- place a bucket under the spout when disconnecting the hose and unloading elbow.
- in case of a liquid spill, place a bucket under the leak (if it cannot be fixed).





**A leak is inconvenient, time-consuming and may be dangerous. It is harmful to the environment and can damage the product. It also damages your reputation. Therefore, always check your equipment. This also takes time, but that does not outweigh all the disadvantages of a leak.**



**A good driver always checks the equipment before starting any work. Take responsibility when performing checks, reporting leaks and cleaning up.**