

# Chlorine Lifting Failure

EPSC Learning Sheet June 2024



## What Happened:

A wire rope broke while lifting a 29-ton tank filled with pressurized chlorine onto a ship.

The container released about 20 tons of toxic chlorine, killing 13 and injuring 250 people.



## Aspects:

- The wire rope's maximum capacity was 10 tons, intended for empty containers. However, the full container exceeded this by almost threefold.
- The ropes lacked tags and markings indicating their rated capacity, making rope mismatch errors easy.
- Use inherently safer solid connections, such as lifting spreaders, to avoid using ropes.
- Inspect critical lifting equipment before use.
- Follow IOGP the recommendation [link](#)
- Remove unnecessary personnel from the immediate area when lifting hazardous chemicals to minimize exposure risks.



## Manage Hazardous Material Lifting Operations