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Caution On Charterers' Requests On Ventilating Hygroscopic

Cargoes

Reports of some charterers making unusual requests on the ventilation of hygroscopic cargoes on passage highlight the need for all parties to be aware of the risks involved in taking readings of cargo hold atmospheres.

Ventilation Methods

There are two rules that help the seafarer decide whether to ventilate a ship's hold:

1. **The 3-degree rule:** Ventilate a hygroscopic cargo if the temperature of the outside air is at least 3°C below that of the cargo temperature (taken at loading).
2. **The dew point rule:** Ventilate when the dew point of the outside air is lower than the dew point of the air in the hold.

Which one should you use?

NorthStandard recommends that for accuracy and safety reasons, the ship's crew use the 3-degree rule to assess the need for ventilation when carrying hygroscopic cargoes.

The main reason for this is that the dew point rule requires the crew to determine the dew point of the atmosphere within the cargo hold, which is not a straightforward process. To achieve accurate results using the dew point rule method, a sufficient flow of air over the wet bulb is needed for evaporation to take place. Unless there is a good flow of air, there will be insufficient evaporation (or, indeed, none at all), and the temperature reading from the wet bulb thermometer will be artificially high.

To ensure a sufficient flow of air, the crew are required to enter the hold and use a whirling psychrometer. Simply hanging thermometers into a hold is insufficient. This poses a serious risk to the safety of the crew – entering a cargo hold can be dangerous, in particular after fumigation has taken place.

The 3-degree rule on the other hand is easy to apply and does not require anyone to enter the hold. The need to ventilate can be simply assessed by comparing the cargo temperature on loading to the ambient temperature outside the hold.

What have charterers asked?

There have been reported instances where charterers have requested the crew use the dew point rule whilst on passage, even making requests for hold entry in circumstances that could put the crew at risk.

As such, our advice in such instances is as follows:

- Contact your usual person in the club to discuss whether the request is reasonable and safe.
- Explain to the charterer why the use of the dew point rule may not be accurate enough to determine when to ventilate.
- If appropriate, explain why hold entry is not safe to the charterer.

Seek written confirmation of the charterer's instructions.

If there is a cargo claim

In the event of a cargo damage claim, one of the forms of evidence most frequently asked for is the ventilation log, which is why accurate records of ventilation are so important.

If the ventilation log provided as evidence for a hygroscopic cargo used the dew point rule, there could be concerns over its accuracy.

Find out more

NorthStandard Members can learn more about cargo ventilation with our loss prevention guide on our legacy North website:

[**Cargo Ventilation: A Guide to Good Practice**](#)

Source of Information: The NorthStandard P&I Club