



Ship Type: Bulk/ Dry Cargo ships Trade Area: All

Bulletin 99 - 06/99 - On Board Fumigants Warning - Noxious Gases/ Spontaneous Combustion from Spent Containers When Wet

It seems to be increasingly common practice to fumigate some cargoes during transit. This is performed by using cartridges or pellets which give off toxic fumes that kill vermin and insects that might be present in the cargo. The fumigant is normally placed in position and activated by a specialist, and the holds are sealed. At the discharge port a chemist usually checks the hold atmosphere before any person is allowed to enter. The crew are then sometimes left with the task of collecting and disposing of the used cartridges and/or other residues of fumigants.

If on board fumigation is requested by shippers or charterers, the master and crew should be provided with full safety instructions by the fumigation specialist. These instructions should include:

- 1) Full details of the type of fumigant, its properties and means of operation;
- 2) The length of time that the fumigant that should be left to work and what ventilation, if any, should then be undertaken;
- 3) The precautions to be taken, including any tests, before entering the holds;
- 4) The requirements for disposal of any residues of the fumigant, which normally require disposal at an approved site in accordance with the requirements of the port safety/health authorities.

It is important that if the crew is left with the task of collecting and disposing of the residues of fumigants, the safety instructions are followed.

The used cartridges may contain residues of the fumigant, which if not properly cared for could be hazardous. If they get wet, the residues of some types of fumigant can release gas which is both toxic and flammable, and which can spontaneously combust.

In most cases the used fumigant should be stowed in an open but covered space, protected from water/excessive damp, with storage in a wire mesh basket or similar container, until it can be brought ashore. Protection from water/moisture is important to minimise the prospect of noxious gases being given off, but the used fumigant needs to be stowed in a basket in open space to allow for any such gas as might be generated to disperse safely.

In one case the master failed to follow the shippers' instructions and stowed the used cartridges in a loosely sealed drum on deck: water got into the drum and noxious gas was given off, which caught fire. The owners face extra expenses from fighting the fire, which they cannot recover from the shippers/charterers, as they had not followed the storage instructions.

For detailed advice on the use of fumigants on board ship we would refer members to the IMO publication "**Recommendations on the Safe Use Of Pesticides In Ships**" 1996 Edition.

Source of Information :- Trevor Elliston (S2)