

Title	IMDG Code 2016 / SUPPLEMENT / Recommendations on the Safe Use of Pesticides in Ships applicable to the Fumigation of Cargo Transport Units / 3
Effective Date	1-1-2012
Invalid from	1-1-2014
Note	Incorporating Amendment 35-10

3 Shore-side fumigation operations - fumigated containers

3.1

Fumigated containers which have been ventilated

3.1.1

It is important to ensure that freight containers are properly ventilated by opening the doors and allowing the gas to escape. This can be a natural process, or can be accelerated by mechanical means such as blowers or extractors. The ventilation process can take many hours.

3.1.2

Freight containers or cargo transport units that have been completely ventilated after fumigation to ensure that no harmful concentration of gas remains should have the warning signs marked to show that it has been ventilated and the date of ventilation (in accordance with Special Provision 902 and Column 17 of the Dangerous Goods list for UN3359 Fumigated Unit) is not subject to the other requirements of the IMDG Code.

3.1.3

Care should be taken even after a container has been declared as ventilated. Gas can be held in packages of cargo, then desorbed over a long period of time, even over many days, raising the level of gas inside the container to above the safe exposure level. Bagged cereals and cartons with large air spaces are likely to produce this effect. Alternatively, gas and the fumigant sachets or tablets can become 'trapped' at the far end of a container by tightly packed cargo.

3.2

Containers loaded without ventilation after fumigation (fumigation in transit)

3.2.1

A freight container or cargo transport unit containing cargo under fumigation should not be allowed on board until sufficient time has elapsed to allow the attainment of a reasonably uniform gas concentration throughout the cargo. Because of variations due to types and amounts of fumigants and commodities and temperature levels, it is recommended that the period to elapse between fumigant application and loading should be determined locally for each country. Twenty-four hours is normally adequate for this purpose.

3.2.2

Carriage of fumigated containers which have not been ventilated before loading must be carried in accordance with the IMDG Code; the text below is reproduced from the 33rd amendment to the IMDG Code. A container which is carried under fumigation is classified as Class 9, assigned a UN Number (UN 3359) and a Proper Shipping Name (Fumigated Unit). The Dangerous Goods List of the IMDG Code also specifies the following for fumigated units. It assigns two Special Provisions:

Special Provision SP302

In the Proper Shipping Name, the word "UNIT" means a cargo transport unit.

Special Provision SP910

A FUMIGATED UNIT is a closed cargo transport unit containing goods or materials that either are or have been fumigated within the unit. The fumigant gases used are either poisonous or asphyxiant. The gases are usually evolved from solid or liquid preparations distributed within the unit. Fumigated units are subject to the following provisions:

1 Cargo transport units shall be fumigated and handled taking into account the provisions of the IMO publication Recommendations on the Safe Use of Pesticides in Ships, as amended.

2 Only cargo transport units that can be closed in such a way that the escape of gas is reduced to a minimum shall be used for the transport of fumigated cargo.

3 Class 9 placards shall not be affixed to a fumigated unit, except as required for other class 9 substances or articles packed therein (see 5.3.1.3).

4 Fumigated units shall be marked with a warning sign affixed to the access door(s) identifying the type and amount of fumigant used and the date and time of fumigation (see 5.3.2.5).

5 The transport document for a fumigated unit shall show the type and amount of fumigant used and the date and time of fumigation (see 5.4.4.2). In addition, instructions for disposal for any residual fumigant, including fumigation devices if used, shall be provided.

6 A closed cargo transport unit that has been fumigated is not subject to the provisions of this Code if it has been completely ventilated either by opening the doors of the unit or by mechanical ventilation after fumigation and if the date of ventilation is marked on the fumigation warning sign. When the fumigated goods or materials have been unloaded, the fumigation warning sign(s) shall be removed (see also 7.4.3).

7 When fumigated units are stowed under deck, equipment for detecting fumigant gas(es) shall be carried on the ship with instructions for their use.

8 Fumigants shall not be applied to the contents of a cargo transport unit once it has been loaded aboard the ship.

3.2.3

In column 17 (Properties and Observations) of the Dangerous Goods list for UN 3359, the following information is given:

A 'FUMIGATED UNIT' is a closed cargo transport unit containing goods or materials that either are or have been fumigated within the unit. The fumigant gases used are either poisonous or asphyxiant. The gases are usually evolved from solid or liquid preparations distributed within the unit. Fumigants shall not be applied to the contents of a cargo transport unit once it has been loaded aboard the ship. A closed cargo transport unit that has been fumigated is not subject to the provisions of this Code if it has been completely ventilated either by opening the doors of the unit or by mechanical ventilation after fumigation and the date of ventilation is marked on the fumigation warning sign (see also Special Provision 910).

3.2.4

Marking of the Cargo Transport Unit

3.2.4.1

To meet the requirements of the IMDG Code the container has to be marked in accordance with chapter 5.3 of the IMDG Code, the relevant text is reproduced below:

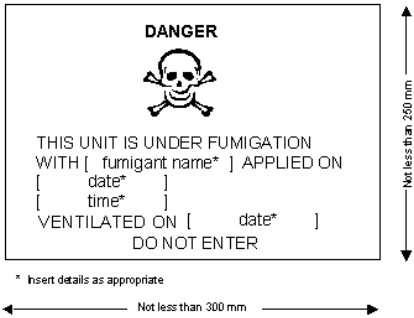
.1 The marking of the proper shipping name (FUMIGATED UNIT) and the UN number (UN 3359) is not required on fumigated units. However, if a fumigated unit is loaded with dangerous goods, any mark required by the provisions in 5.3.2.0 to 5.3.2.4 shall be marked on the fumigated unit.

.2 A fumigated unit shall be marked with the warning sign, as specified in .3, affixed in a location where it will be easily seen by persons attempting to enter the interior of the unit. The marking, as required by this paragraph, shall remain on the unit until the following provisions are met:

.1 the fumigated unit has been ventilated to remove harmful concentrations of fumigant gas; and

.2 the fumigated goods or materials have been unloaded.

.3 The fumigation warning sign shall be rectangular and shall be not less than 300 mm wide and 250 mm high. The markings shall be in black print on a white background with lettering not less than 25 mm high. An illustration of this sign is given below:



Transport documentation for the fumigated cargo transport unit

3.2.5

To meet the requirements of the IMDG Code the container must be documented in accordance with chapter 5.4 of the Code the relevant text is reproduced below:

Paragraph 5.4.4.2 Fumigated unit

The transport document for a fumigated unit shall show the type and amount of fumigant used and the date and time of fumigation. In addition, instructions for disposal of any residual fumigant, including fumigation devices, if used, shall be provided.