



Maritime and Coastguard Agency

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## Unsafe Shipments of Gas Cylinders in Freight Containers

Notice to Ship Operators, Masters Ships' Officers, Shippers, Cargo Packers, Cargo Consolidators, Hauliers, and Freight Forwarders

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### *Summary*

- Several shipments of gas cylinders have been found to have been transported within freight containers in an unsafe manner and in contravention of the Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997
- This Note provides guidance on the responsibilities of and the action to be taken by persons involved in this trade.

1. The Maritime and Coastguard Agency (MCA) is extremely concerned about the transport of unsafe consignments of gas cylinders. The cylinders contain, or have contained, gas (butane, propane etc) used for fuel in cars, caravans and boats or for cooking and similar purposes. Such gas cylinders pose a considerable risk to the safety of personnel and damage to property because of their potential to explode in transit either ashore or on board ships.
2. The Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (the Regulations) are applicable to the transport of all gases in cylinders. Any person responsible for the packing and transport of cargo transport units (CTU) with gas cylinders, ashore or on board, is liable to prosecution for non-compliance with these regulations.
3. The Regulations require that each shipment of gases in cylinders be accompanied by a dangerous goods declaration. This declaration is part of the Dangerous Goods Note (DGN) which combines the declaration with the Shipping Note and the Container/Vehicle packing certificate.
4. Persons are reminded that wrongful declaration or non-declaration of flammable gas cylinders (sometimes referred to as bottled gas cylinders) is an offence under the Regulations punishable by imprisonment or unlimited fines or both on indictment.
5. For the guidance of personnel completing the DGN, the following should be noted:
  - (i) The term 'exporter' in box 1 includes the 'shipper' referred to in regulation 2. (1) of the Regulations, that is, the person offering the consignment for carriage by sea.
  - (ii) The term 'freight forwarder' in box 7 means the 'forwarder' in the same regulation and includes any person responsible for packing the goods in the CTU.
  - (iii) The term 'cargo transport unit' is also defined in the Regulations and includes freight containers and road vehicles.
6. Reference should also be made to the LPG Code of Practice No. 17 – Purging LPG Vessels and Systems published by the LP Gas Association.

7. Gas cylinders may be considered to be non dangerous with regard to the Regulations under the following conditions:-
  - (i) They are empty and cleaned.
  - (ii) They are gas free. If they had previously contained a flammable or toxic gas, they shall be accompanied by a document certifying that they are free of such gases, signed by a competent person
  - (iii) They are not under pressure. Valves have either been removed or have been shut firmly and the outlets fitted with sealing caps.
8. Sulphur compounds such as mercaptans are often added to flammable gases as odourisers prior to their sale to aid detection on escape from the cylinders. Personnel involved in preparing the shipment for transport should be alert to any signs, such as odours indicating that the cylinders offered for transport may contain such gases.
9. The MCA and the Health and Safety Executive (HSE) have published a booklet titled "Dangerous Goods in Cargo Transport Units" obtainable from The Stationery Office. This booklet indicates the four participants in the transport chain who have responsibilities for ensuring safety up to the point where the CTU is loaded on to the ship.
10. Cylinders declared to be empty and free of gases on the Standard Shipping Note will be inspected from time to time by the MCA. For a gas cylinder which had previously contained a flammable gas, to be certified to be gas free, the contents should be at atmospheric pressure with a gas concentration less than 5% of its Lower Flammable Limit in air. Persons certifying improperly that such cylinders are free of gas will be liable to prosecution.
11. Port Authorities and others involved in the transport chain are requested to be particularly vigilant and notify their local MCA office (tel. 0870 600 6505 after office hours) or the Dangerous Goods Section of the MCA (tel. 023 8032 9392) if they have any reasons to suspect that the consignment does not meet the requirements of the Regulations.

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