



香 港 商 船 資 訊

HONG KONG MERCHANT SHIPPING INFORMATION NOTE

Safe Loading of Fluorspar Cargo

To : Shipowners, Ship Managers, Ship Operators, Masters and Officers

Summary

A Hong Kong registered ship developed a heavy list to its port side while sailing in the Indian Ocean at east of Sri Lanka. The list continued to be worsening and the vessel finally sank two days after the initial listing. The probable cause of ship sinking is believed to be liquefaction of the fluorspar cargo inside the cargo holds. This Note draws the attention of the shipowners, ship managers, ship operators, Masters and Officers to the safety precautions on loading fluorspar or other bulk cargoes that may liquefy.

The Incident

1. On 18 May 2005, while en-routing from Sungei Pakning of Indonesia to India, a Hong Kong registered ship suddenly developed a list of 15 degrees to port side in position about 173 nautical miles east of Sri Lanka. The list continued to be worsening and the Master abandoned the vessel after the port weather deck was immersed into water at a list of 40 degrees. All 23 crews were rescued by a passing container vessel. A salvage tug was called in the following day trying to rescue the vessel but without success. The Hong Kong registered ship finally sank two days after the initial listing on 20 May 2005.

2. Investigation into the incident identified that the probable cause of the incident was liquefaction of the fluorspar cargo inside the No.1 and No. 3 holds. The shift of unstable and semi-liquefied fluorspar cargo in the holds is believed to have caused a list to the vessel during the sea passage which progressively increased causing the vessel to capsize and sink.

Lessons Learnt

3. The fluorspar cargo was loaded in Hong Kong. The shipper failed to provide the Transportable Moisture Limit (TML) of the fluorspar cargo to the Master before shipment as required by the Merchant Shipping (Safety) (Carriage of Cargoes) Regulation and the Code of Safe Practice for Solid Bulk Cargoes (BC Code). In this incident a 10% TML for bulk fluorspar had been used by the shipper without documentation support from any laboratory and accepted by the Master.

4. Section 3 of the Merchant Shipping (Safety) (Carriage of Cargoes) Regulation (Cap. 369) stipulates that the owner or master of a ship shall not accept for carriage any cargo unless the shipper has furnished with information on the TML and moisture content of the cargo. The master or owner of a ship shall not accept for carriage by the ship any cargo that may liquefy when carried by sea unless the actual moisture content of such cargo is less than its TML.

5. Even when the shipper has furnished with information on the TML and moisture content of the cargo, if the master has doubts in regard to the appearance or condition of the material, a simplified in-situ testing method for providing a rough idea on the possibility of flow may be carried out by half filling a cylindrical vessel of about 1 litre capacity with a sample of the cargo and striking it against a hard surface at least 25 times. If free moisture appears on the surface of the sample, additional laboratory tests should be conducted.

6. The attention of shipowners, ship managers, ship operators, master and officers is drawn to the lessons learnt above.

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