

# BULLETIN

5 January 2015

## To all Members

### Bauxite liquefaction

The recent loss of the *BULK JUPITER* whilst on a voyage from Kuantan Malaysia to China fully laden with bauxite has again highlighted previous concerns raised regarding the carriage of bauxite, and particularly the potential for liquefaction. In the last month extremely heavy monsoon rain has been experienced in Malaysia, and stock piles of bauxite at ports such as Kuantan are very wet. Open storage conditions generally prevent the cargo from draining or drying sufficiently before being loaded.

Members will be aware that bauxite is classed as a Group C cargo in the International Maritime Solid Bulk Cargoes (IMSBC) Code i.e. neither liable to liquefy (Group A) nor to possess chemical hazards (Group B). Bauxite is described as 'a brownish, yellow claylike and earthy mineral, insoluble in water.'

In order to be classified as Group C bauxite must have properties within the following parameters:

Moisture content between 0% to 10%.

Size - 70% to 90% lumps, varying between 2.5 mm and 500 mm and 10% to 30% powder.

Appendix 3 paragraph 2.1 of the IMSBC Code, states:

"Many fine-particled cargoes, if possessing a sufficiently high moisture content, are liable to flow. Thus any damp or wet cargo containing a proportion of fine particles should be tested for flow characteristics prior to loading".

If the moisture content of the cargo is over 10%, then the cargo should be reassessed and possibly reclassified. Furthermore, with regard to moisture content, if there has been any significant rain between the time of testing and loading, Section 4.5.2 of the IMSBC Code states that "The interval between sampling/testing and loading shall never be more than seven days."

Members proposing to load or in the process of loading a cargo of bauxite in Kuantan, Malaysia or any other port with prevailing or recent wet weather conditions are therefore advised to contact the Managers promptly to assess the requirement for appointing a suitable surveyor, and to treat these cargoes as potential Group A cargoes, i.e. cargoes which may liquefy if shipped at a moisture content in excess of their transportable moisture limit.

In summary, if the cargo proposed for loading does not meet the properties listed in the IMSBC Code, or if a 'can test' raises any doubts about the fluidity of the cargo, or if there are any doubts regarding the general characteristics of the cargo, then the requirements of section 1.3 of the IMSBC Code, "Cargoes not listed in this Code", should be followed.

Members are also referred to the article on our website entitled, Cargo Liquefaction – An Introduction (<http://www.britanniapandi.com/focus/liquefaction-a-summary/>)

Please contact the Managers in case of any doubts or further queries.