



# Technical Circular

No.: 018/2018

Date: 16<sup>th</sup> February 2018

**To whomsoever it may concern**

**Subject: Carriage of Bauxite and other solid bulk cargoes that may liquefy.**

- Cargoes subject to potential liquefaction issues are referred to as Group A cargoes in the International Maritime Solid Bulk Cargoes (IMSBC) Code.
- The IMSBC Code contains an individual schedule for BAUXITE, which is a Group C cargo defined as liable to neither liquefy (Group A), nor to possess chemical hazards (Group B).
- IMO's Sub-Committee on Carriage of Cargoes and Containers (CCC); through circular CCC.1/Circ.2/Rev.1, warns of the dangers of Bauxite cargo; noting that some bauxite cargoes, specifically those which contain more amount of bauxite fine particles, present a risk caused by moisture and may be treated as Group A cargoes.
- Dynamic separation occurs during a voyage when the cargo contains enough small particles that stop the moisture draining from the cargo.
- Bauxite fines cargo may be subject to Dynamic Separation due to moisture content, forming liquid slurry above the solid material creating a free surface effect which may affect the ship's stability while transporting this cargo.
- Based on above, the IMO circular includes following draft amendments which are pending for adoption in 2019 and expected enter into force to the IMSBC code on 1 January 2021:
  1. Draft Test Procedure for Determining the transportable moisture limit (TML) for bauxite;
  2. Draft individual schedule for bauxite of Group A (Bulk Cargo shipping name as "BAUXITE FINES"); and
  3. Draft amendments to the existing individual schedule for bauxite of Group C (bauxite with a lower amount of fine particles and the degree of saturation due to moisture is not liable to reach 70%).
- In view of above, Republic of Liberia has revised Marine Advisory no.02/2018 providing guidance for safe transport of bauxite and potential risks associated with carriage of such cargoes.

- Administration has provided below link to AMSA website where the above dynamic separation phenomenon in bauxite cargo is described showing the effect of free slurry on stability of ship.

<https://www.amsa.gov.au/vessels-operators/cargoes-and-dangerous-goods/dynamic-separation-cargoes>

- Administration has advised owners, operators and masters to take appropriate actions and act accordingly taking into account the provisions of relevant requirements while handling and carrying bauxite in bulk.
- Also masters are encouraged to carefully follow the requirements of IMSBC code section 7 and 8 regarding additional information on cargoes that may liquefy and check test procedures for such cargoes.
- Ship owners/ operators are advised to be guided by above.

**Enclosure:**

1. Republic of Liberia marine advisory 02/2018.

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