



Technical Circular

No.: 076/2018

Date: 8th October 2018

To whomsoever it may concern

Subject – Carriage of Ammonium Nitrate Based Fertilizer (ANBF).

- Reference is made to our Technical Circular No. 069/2018 dated 11th September 2018 and recently issued casualty investigation report by INTERCARGO for cargoes presented for shipment as a Group C, AMMONIUM NITRATE BASED FERTILIZER (non-hazardous).
- Given the very severe consequences associated with incidents of this nature, it is deemed essential that all stakeholders responsible for the safe shipment of these products recognize the utmost importance of declaring the product properly, ensuring effective monitoring when on voyage and following the emergency procedures correctly in the event of a perceived chemical reaction. Therefore, for the purpose of crew awareness additional recommendations are being provided in the current regulations.
- The three individual Schedules for AMMONIUM NITRATE BASED FERTILIZER (ANBF) referenced with their formal Bulk Cargo Shipping Names in the 2018 edition of the International Maritime Solid Bulk Cargoes Code (IMSBC) are:
 - i. AMMONIUM NITRATE BASED FERTILIZERS UN 2067
 - ii. AMMONIUM NITRATE BASED FERTILIZERS UN 2071
 - iii. AMMONIUM NITRATE BASED FERTILIZERS (non-hazardous).
- Of these, i) and ii) above (“UN 2067” and “UN 2071”) are defined as Group B – possessing a chemical hazard which could give rise to a dangerous situation on board a ship. The “non-hazardous” (iii) is defined as Group C cargo defined as neither liable to liquefy nor to possess chemical hazards.
- The term “non-hazardous” on shipping documents in respect of ANBF can be misleading and it is recommended to re-confirm their understanding of emergency procedures quoted in the IMSBC Code for the actual ANBF schedule presented for shipment. Responsible parties should re-assure themselves through careful reading of shipper or manufacturer originated documentation, that the correct cargo schedule is applied and that, for example, a Group C cargo is not in fact, a Group B cargo.
- In the event of any doubt about whether the cargo presented for shipment is Group B or Group C, it is recommended that the precautionary principle applies and arrangements for shipment proceed under the most onerous Group B arrangements until full reassurance has been received from the shipper.
- Further advice including action to be taken in the event of an ANBF cargo undertaking a chemical reaction known as Self Sustaining Decomposition (SSD) and the possible



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. While we have taken utmost care to be as factual as possible, readers/ users are advised to verify the exact text and content of the Regulation from the original source/ issuing Authority.

release of toxic gases involving very high temperatures is contained in IMO Circular CCC.1/Circ.4, issued on 22 September 2017.

- IMO is currently engaged in further discussions to remove any potential misunderstandings of the term “non-hazardous” associated with Group C ANBF cargoes. Prior to this clarification, the following points are emphasized from the existing IMSBC Code and IMO Circular CCC.1/Circ.4 requirements, although in all cases, it is requested that all requirements mentioned in both sources should be complied with.
- Points of emphasis from IMSBC Code, and IMO CCC.1/Circ.4 for cargoes presented as AMMONIUM NITRATE BASED FERTILIZER (non-hazardous):
 1. CORRECT DECLARATION: Does the shipper or manufacturer originated documentation align with the description given in IMSBC Code schedule? If not, re-confirm with the shipper the correct schedule to be applied to the cargo including but not limited to, whether the cargo should be carried under Group B arrangements such as those mentioned in the schedule for AMMONIUM NITRATE BASED FERTILIZER UN 2071.
 2. ELECTRICAL: Is the crew aware that ANBF cargoes may decompose and give off toxic gases under certain conditions, such as proximity to sustained heat sources? Is all electrical equipment – especially hold lamps, intrinsically safe and in accordance with the Annex to the list of equipment in the ship’s Document of Compliance? Are power sources appropriately disconnected in accordance with the IMSBC Code when the cargo is on board?
 3. MONITORING: Are cargo temperatures regularly monitored and properly recorded? Prior to loading, was the cargo hold clean and dry? Are the stowage and segregation requirements met?
 4. EMERGENCY ACTIONS: If temperatures are sufficiently high, are crew aware under the IMSBC Code Emergency Procedures that CO2 systems will not work, and that copious quantities of water and maximum ventilation will be required? Access to the cargo should not be unduly impeded by any other cargo arrangements, such as break-bulk cargo preventing easy access.
 5. NO HOT WORK: Hot work restrictions apply – see IMSBC. No bunkering in accordance with IMSBC Code requirements.
 6. TEST RESULTS: Consider requesting any relevant test results for the cargo presented for shipment, noting any appropriate UN Test results obtained, details of whether the cargo has been independently tested and the composition details of the cargo presented for shipment.

The word “**CEMENT**” can be made from the first letter of these six points as an aid to remembering these significant requirements.

- Ship Owners/ managers and masters are advised to be guided by above.

Enclosure:

1. IMO Circular CCC.1/Circ.4 dated 22 September 2017

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