

BUNKER FLASH

High Catalyst Fines (Catfines) found at Singapore Ports

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FINDINGS & INSIGHTS

During the period of 25 July 2025 to 02 August 2025, Maritec Pte Ltd (hereafter referred to as Maritec-Naias) tested forty samples representing VLSFO deliveries from various suppliers at Singapore ports, which indicated Aluminium and Silicon (Al+Si) concentrations ranging from 51 mg/Kg up to 120 mg/kg.

Maritec-Naias findings of Al+Si concentrations in the forty samples tested were as follows:

- Two samples indicated Al+Si concentrations above 100 mg/Kg levels
- Eleven samples indicated Al+Si concentrations above 60 mg/Kg levels
- Twenty-nine samples indicated Al+Si concentrations between 51 to 60 mg/Kg levels

While thirty eight out of forty samples fell within the specifications of ISO8217:2005 (80 ppm) and even within the ISO8217:2010/2017 specifications (including permitted limits of 72 PPM as per ISO4259 for a single test result), the Catfines content can still be considered at high levels.

Aluminium and Silicon are main classes of abrasive solids found in fuels. High levels of abrasive particles at the engine inlet may lead to abnormal wear and tear of the fuel system components, piston rings and cylinder liners. In fact, to control the amount of catalyst fines delivered to the engine, many engine builders specify a maximum limit of 15 mg/kg of Aluminium plus Silicon at the engine inlet.

An efficiently operating fuel purification system is the preliminary method of removing these particles. Measuring the fuel's Aluminium and Silicon concentrations before and after the system's centrifuge provides an indication of the efficiency of the purification system in removing catalyst fines.

OUR RECOMMENDATIONS

Maritec-Naias recommends collecting samples from within the fuel system at points such as the fuel oil tank transfer pump, before and after centrifuge, service tank and after filter samples to check the fuel cleaning efficiency.

Maritec-Naias states, while all presented findings are true, this document, does not reflect on the overall quality of fuel being supplied in the Singapore region. If you intend to bunker at this region please request a Certificate of Quality prior to loading.

Maritec-Naias can assist you with further information on quality of bunkers tested in different regions. If you require any other information or assistance do not hesitate to [Contact us](#).