

## BUNKER FLASH

### High TSP Fuels in Port Klang, Malaysia

Issued on 1 March 2022

**Maritec Pte Ltd** has tested several samples representing VLSFO deliveries in Port Klang, Malaysia with TSP higher than 0.10 % m/m for the period of **16<sup>th</sup> Feb 2022 to 28<sup>th</sup> Feb 2022**. The VLSFO was delivered by the different supplier and barge ranging from 0.14% m/m to 0.32% m/m to different vessels.

A high TSP fuel may be unstable and ultimately unusable since the precipitated asphaltenes, together with the entrained fuel forms excessive sludge concentrations in tanks and can choke purifiers, filters, fuel injection equipment and even the fuel lines themselves. Under such conditions fuel treatment is often impossible and even transfer becomes problematic particularly in case of thermally unstable fuels where problems manifest in the filters, purifiers and fuel service system heaters.

If your vessel has bunkered a high TSP fuel above 0.07% m/m it is advised to assess the stability of the fuel further by SMS1600 indicating the P-Value of the fuel to safeguard vessel equipment against breakdown and prevent delays to operations.

P-value or peptizability is an indication of the stability or available solvency power of an oil with respect to precipitation of asphaltenes.

P-value is defined as  $(1 + X_{min})$ , where  $X_{min}$  is the minimum volume of paraffinic solvent, n-heptane, (in mL) needed to be added to 1 g of oil to result in flocculation of asphaltenes (visually detected by microscope), the smallest P-value is 1, which means the oil is unstable and can precipitate asphaltenes without addition of any paraffinic solvent.

The P-value of an oil gives information on stability and stability reserve. A higher P-value indicates that an oil is more stable with respect to flocculation of asphaltenes.

P-value	Stability
P-value < 1.00	Fuel is not stable
$1.00 \geq P\text{-value} < 1.20$	Fuel is marginally stable
$1.20 \geq P\text{-value} \leq 1.50$	Fuel with acceptable stability
P-value > 1.50	Fuel is stable: For strategic long-term storage, fuels with a higher P value (e.g. > 1.5) are preferred as this provides a wide margin for ageing.

*Note: Table is for guidance only.*

...

**Please feel free to contact us:**

Website: <https://www.maritec.com.sg>

Email: [admin@maritec.com.sg](mailto:admin@maritec.com.sg)

Tel: [+65 62718622](tel:+6562718622)

...

This flash however does not reflect on the overall quality of fuel being supplied at Malaysia, if you intend to bunker at this region please request for a Certificate of Quality stating the TSP prior to loading.

Maritec Pte Ltd can assist you in 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.

**CTI-Maritec** can assist you in 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](#).

...

**Please feel free to contact us:**

Website: <https://www.maritec.com.sg>

Email: [admin@maritec.com.sg](mailto:admin@maritec.com.sg)

Tel: [+65 62718622](tel:+6562718622)

...