

MARINE FUEL INSIGHTS #50

Q3-2024

RELEASE DATE: 04-11-2024

Monitoring the availability, quality and compliance of global marine fuel supply



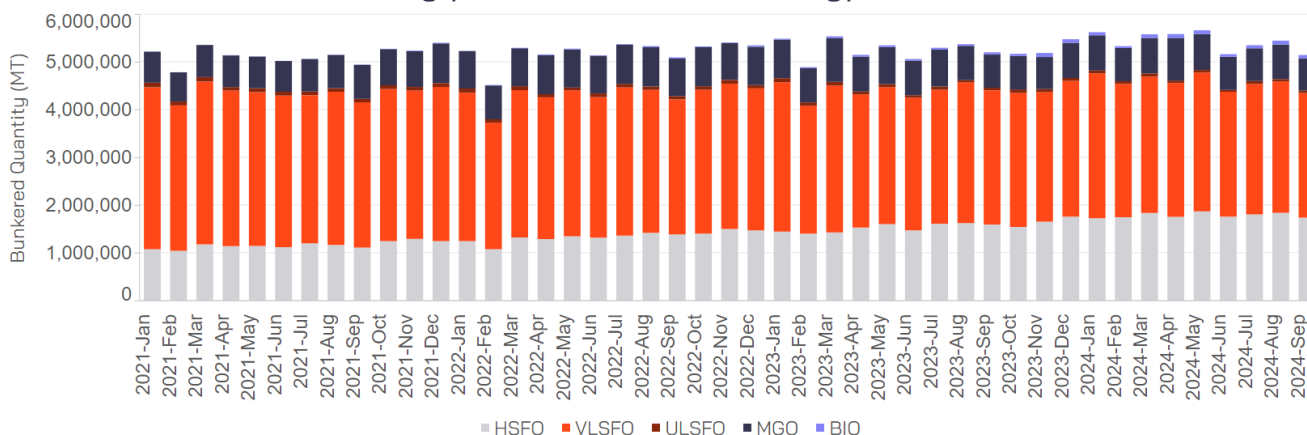
Executive Summary

Welcome to the Quarter 3 2024 edition of Marine Fuel Insights. In this quarter's edition, we observe that **HSFO deliveries had surpassed VLSFO deliveries** in Europe's largest bunkering port – Rotterdam. This trend continued this quarter with only a slight increase this time, only 3% increase in HSFO bunkered quantity compared to Q2, although we observe ca. 20% more bunkered HSFO than VLSFO in Rotterdam in Q3 2024. Monitoring Singapore, we see a similar trend, but VLSFOs are still the preferred bunkering fuel with HSFO bunkered quantity being only 3% lower than VLSFO bunkered quantity in Q3. In Q1 this difference was more than 20%. Read on to learn more!

Marine Fuel Supply

Marine fuel supply decreased in Q3-2024 in some regions, but overall, we see only a 1% decrease since last quarter. Looking at the different types of marine fuel, we observe a decrease in VLSFO supply of approximately 2% and MGO supply of around 14%. ULSFO deliveries increased this quarter by 14%, while HSFO and BIO remained stable globally. However, there were significant increases in HSFO deliveries in South America (17%) and Middle East (10%). The **biofuels category saw a noticeable 40% increase**, primarily driven by deliveries in the **Singapore region**, but decreased by ca. 40% in Europe, reaching back the supply values we saw in Q1.

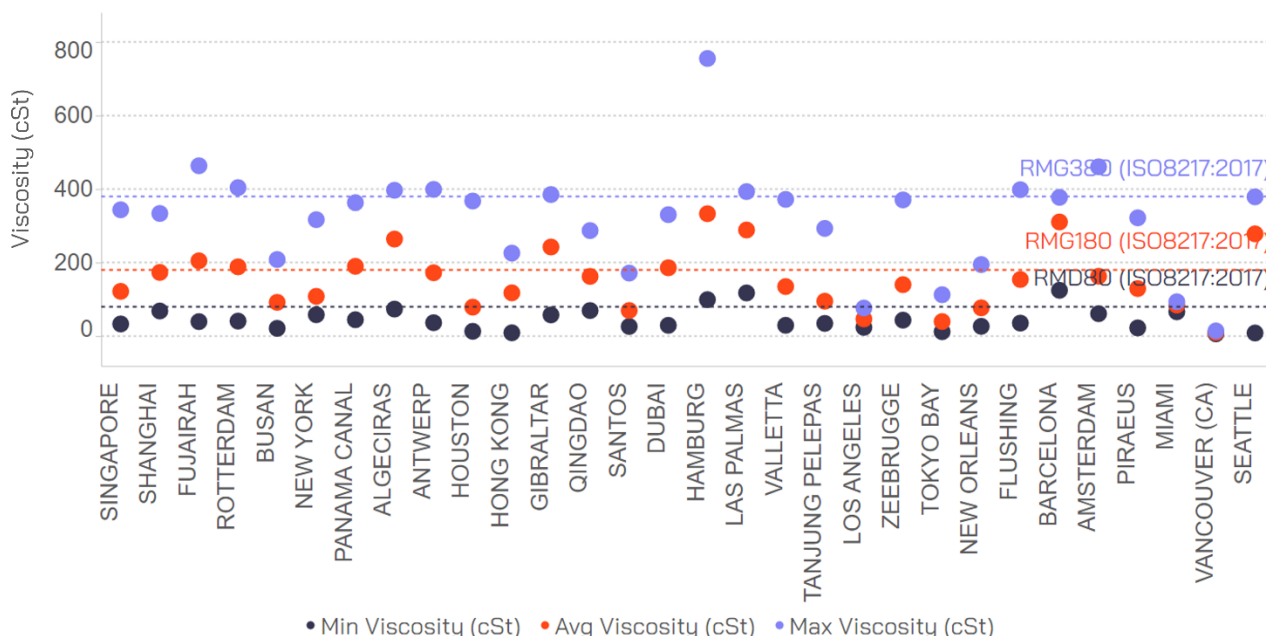
Bunkered Quantity per Month | Per Fuel Type | 2021 – 2024 YTD



Density & Viscosity

Compared to the last quarter, the distribution remains constant for all fuel types. There is a slight increase in the upper density category 981-991 mg/m³ for biofuels. We observe increased values in VLSFO density and density off-specs in Amsterdam, Hamburg and Houston. Like the last quarter's edition, a higher number of VLSFO viscosity off-specs were observed, with only 5% being marginal. Many off specs concentrate around Algeciras, Las Palmas, Lisbon and Skagen ports. These issues are observed in ARA region, Singapore, Panama Canal and Hamburg. Only 3% of the off specs in MGO are viscosity driven and majority concentrated in ARA region.

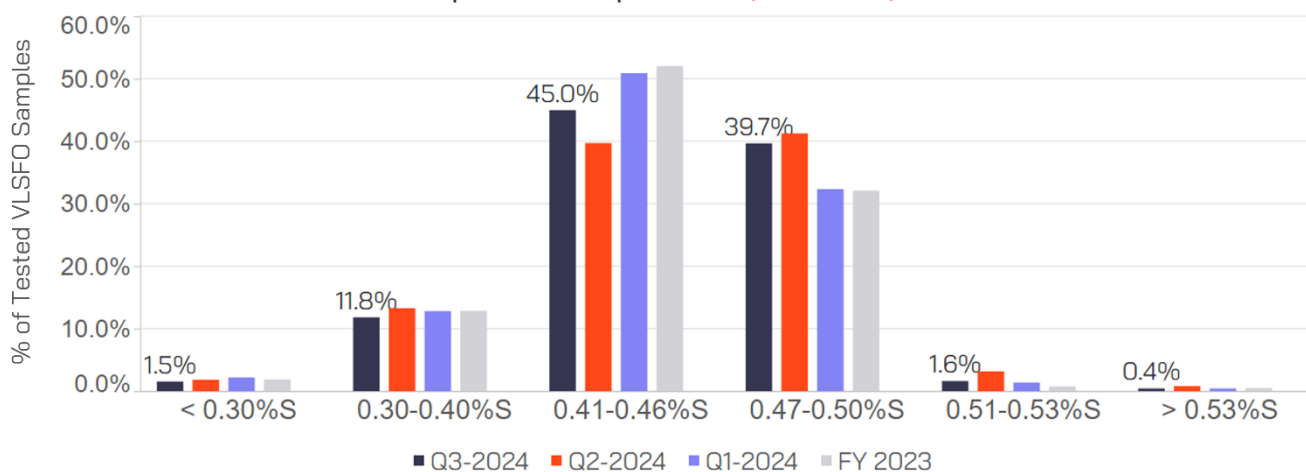
VLSFO Viscosity Statistics | Top 30 Ports | Q3 2024



Sulphur & Flash Point Compliance

The percentage of VLSFO samples that fall within the 0.51-0.53%S category decreased from 3.1% to 1.6% this quarter. VLSFO Sulphur non-compliance remained stable or decreased in most bunkering regions, but we note an increase in VLSFO sulphur off-specs in a.o. Middle East and Africa. A larger percentage of ULSFO samples tested FP values within 60-65 °C this quarter rising to ca. 20% vs ca. 7% in Q2.

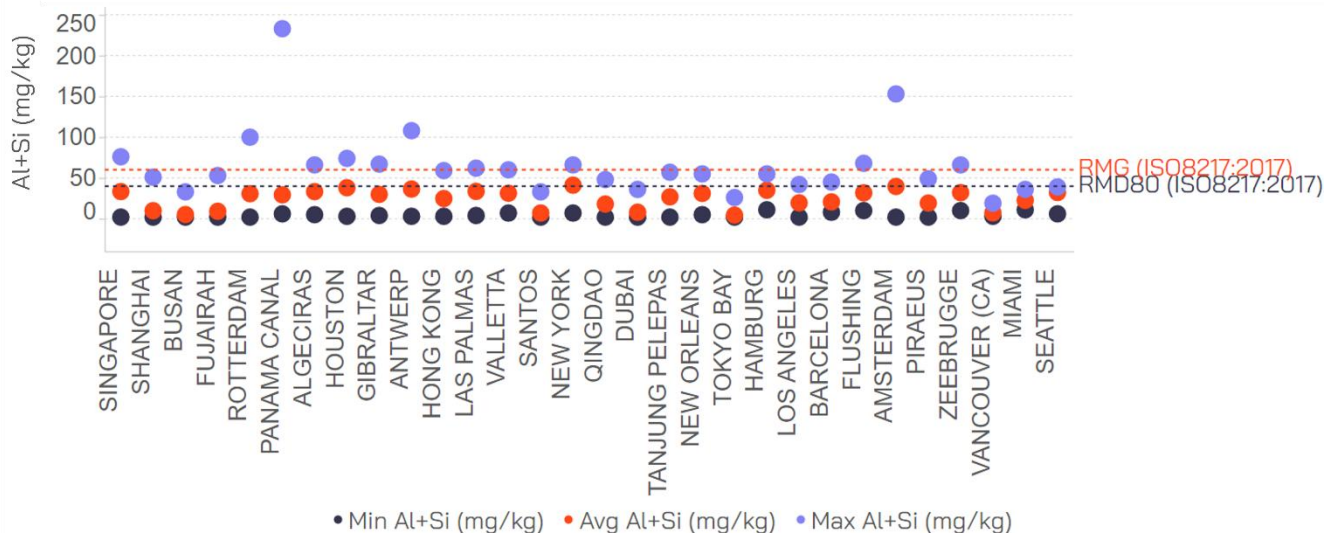
VLSFO Sulphur Compliance | Global | Q3 2024



Catalytic Fines

In Q3 2024, there is a slight increase in the proportion of VLSFOs with relatively high cat fines (Al+Si > 40 mg/kg). Currently, 18.7% of tested VLSFO samples in Q3 2024 exhibit relatively high levels of cat fines. We observe some serious VLSFO cat fine off-specs in Panama Canal (max. 233 mg/kg), Amsterdam (max. 153 mg/kg), Antwerp (max. 108 mg/kg) and Istanbul (max. 102 mg/kg). In addition to these ports, Al+Si off-specs were observed predominantly this quarter in Houston, New York, Rotterdam, Singapore and Algeciras.

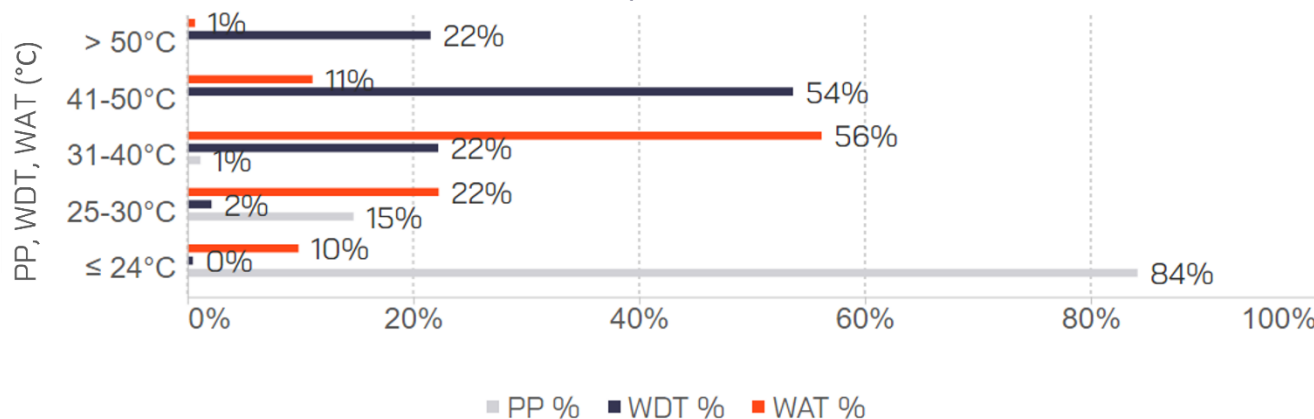
Cat Fines Compliance | VLSFO | Top 30 Ports | Q3 2024



Cold-flow Properties

This quarter 1% out of the VLSFO samples we tested exhibited pour-point off-specs, primarily in Europe (Antwerp, Hamburg) and Singapore. Meanwhile, MGO off-specs decreased to 4%, predominantly in Singapore, the ARA region, Fujairah, and Busan.

VLSFO Cold-Flow Properties | Global | Q3 2024



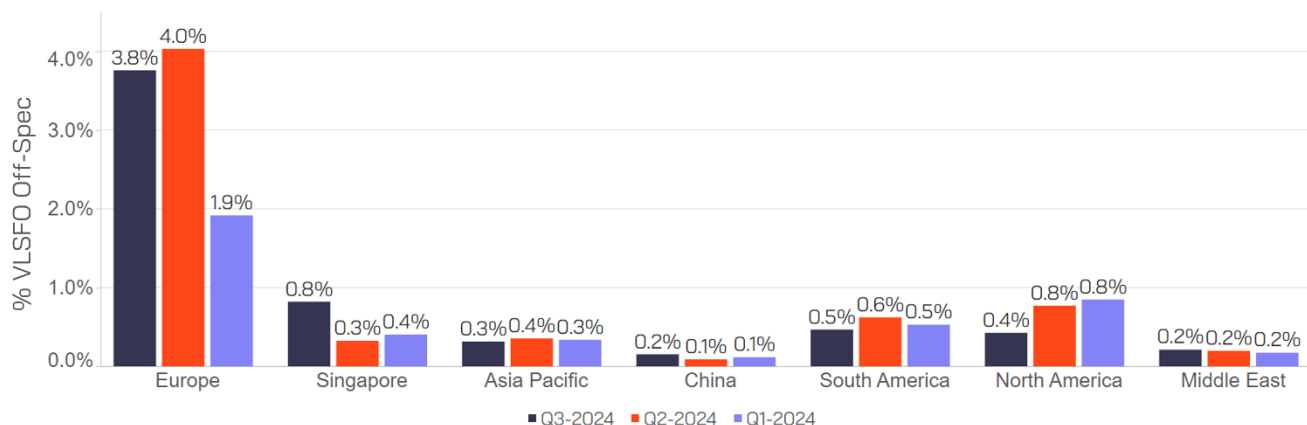
Fuel Stability

In Q3 2024 VLSFO off-spec rate due to high TSP increases slightly to 0.3% of all tested VLSFO samples. The TSP off-specs were concentrated in Europe region. The total percentage of VLSFOs with relatively high TSP remains stable at 3.5%.

Off-Specs

The global VLSFO off-spec percentage has remained stable after the increase we observed in Q2, currently at **6.3% of all tested VLSFO samples** in Q3 2024. In **ULSFO off-specs we see a big jump of 10%**. This was driven by a doubling in pour point off-specs in Lubeck port (Germany), Rotterdam and Antwerp.

VLSFO Off-Spec Rates | By Region | Q3 2024



Accessing Marine Fuel Insights

As global market leader in marine fuel testing and bunker quantity surveys, Veritas Petroleum Services (VPS) has tested the most marine fuel samples in the market to-date and has witnessed first-hand what new fuels have to offer, and what the expected issues and risks in managing these fuels will be. Based on this data, VPS has launched Marine Fuel Insights.

Marine Fuel Insights is a quarterly subscription-based service, where VPS' technical expertise is combined with its proprietary database of fuel oil and distillate samples, to derive special insights for its users.

Topics covered in the report include the availability of marine fuels, with an emphasis on VLSFOs, the quality of the tested fuels, potential operational issues, the performance of the fuel on a commercial level (e.g. energy content), operational level (e.g. catalytic fines, cold-flow properties), and compliance level (e.g. sulphur content).

Marine Fuel Insights is aimed at reducing the anticipated operational issues caused by the introduction of VLSFOs to the market. Users of this service should use the information to prevent vessel downtime, operational delays, maritime incidents and in general to manage their fuels appropriately post-2020.

The information contained in Marine Fuel Insights should provide bunker managers, fuel procurement officers, technical managers, fleet managers, fuel suppliers and chief engineers with the necessary information, recommendations and insights to anticipate and efficiently manage VLSFOs.

Marine Fuel Insights is released on a quarterly basis by VPS. You can request more information about how you can subscribe at [here](#).