

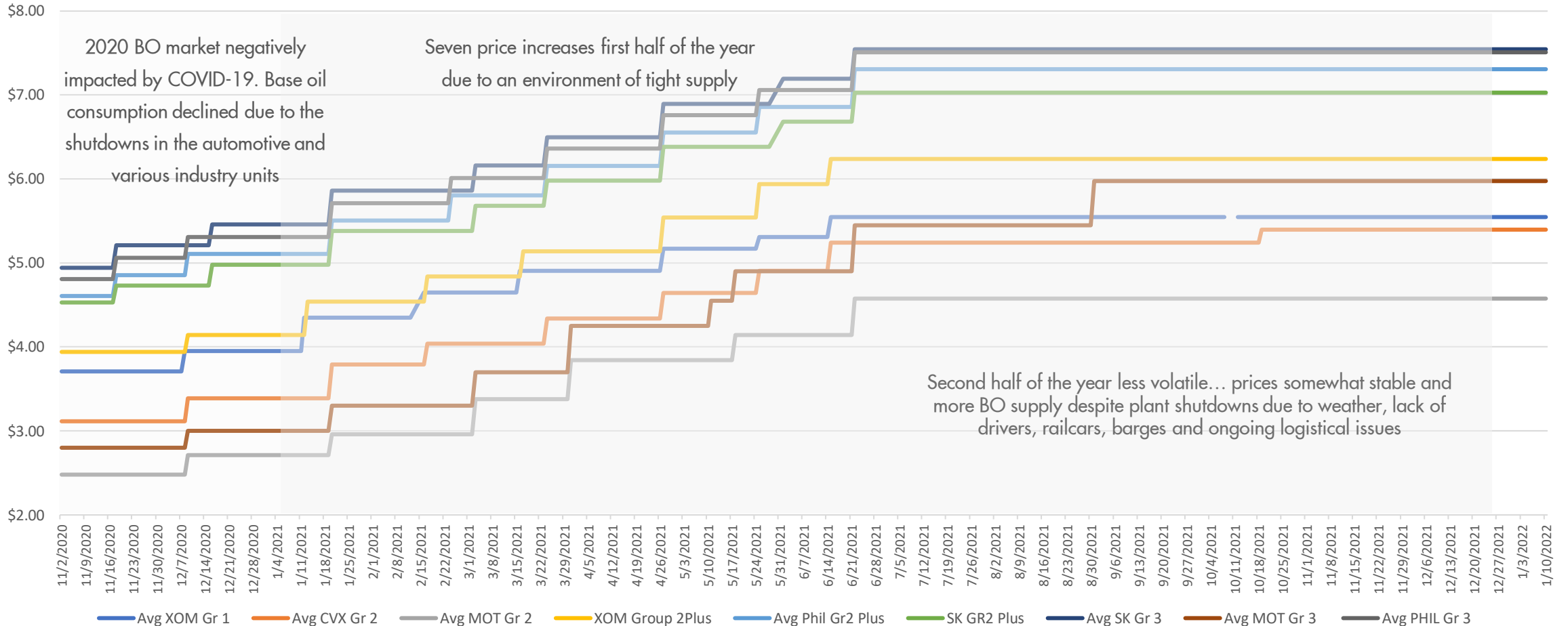


US Market Conditions

March 2022

Base Oil Market

Base Oil Prices

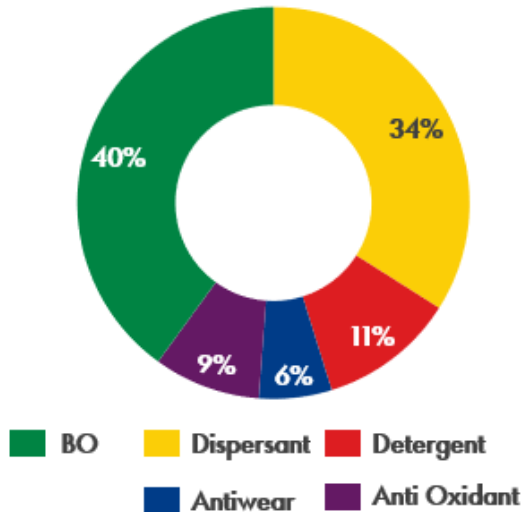


Sources: *Lubes&Grease, *ICIS, ZEMA

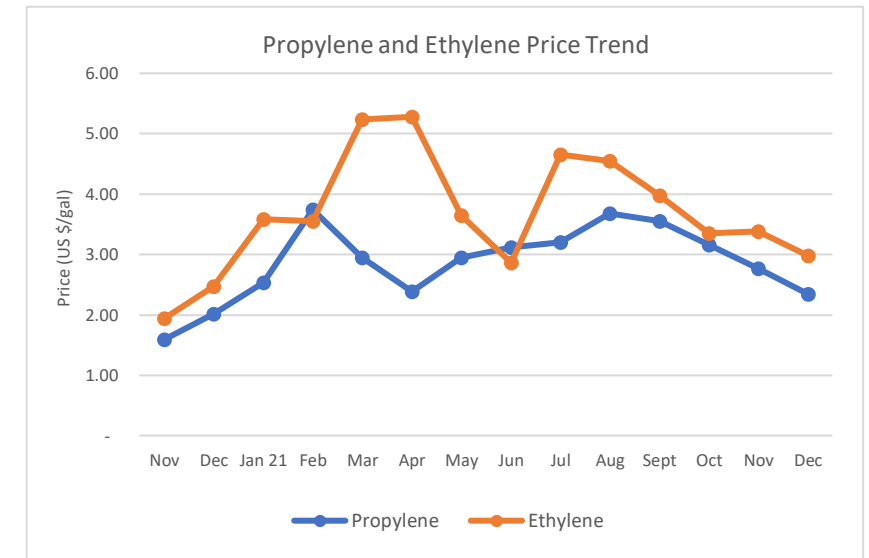
Additives Outlook

Around 30 to 40% of the cost of an additive is base oil. The rest will come from 10 to 15 different components, most derived from ethylene and propylene

PCMO additives building blocks



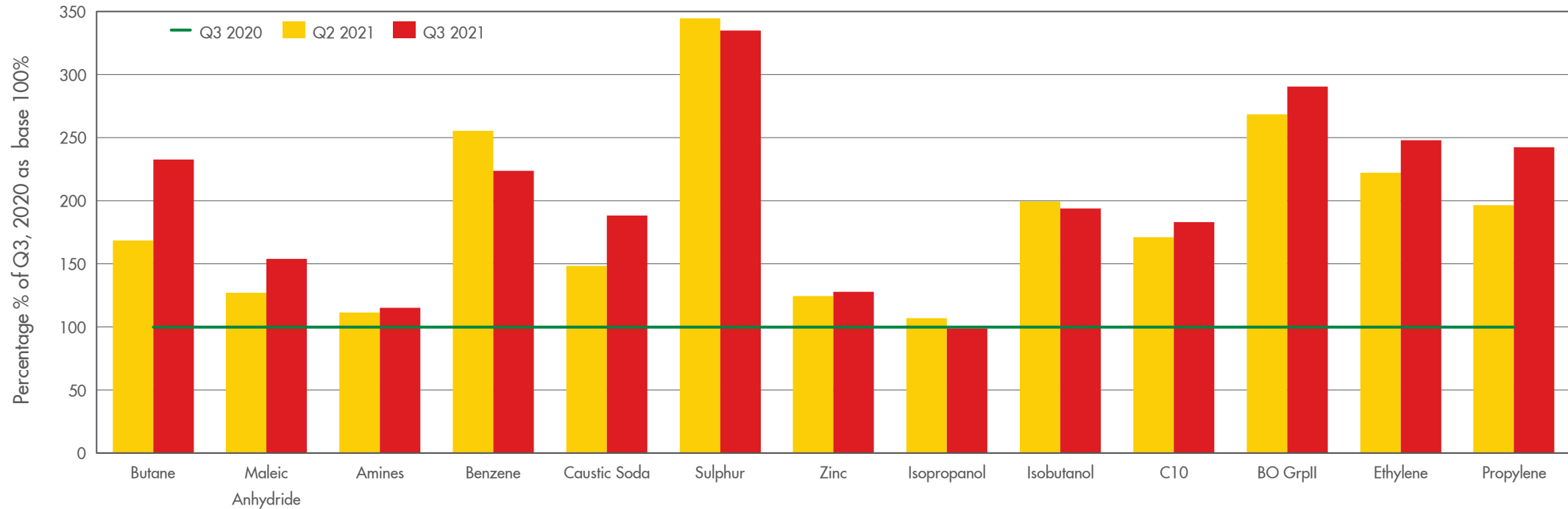
- 2021 has seen an increase for most additives' raw materials of about 40 to 50%. The expected impact on finished lubricant is of 3~10% of the material cost. These price movements have been a record for additives.
- Additive prices continued to increase through Q3 and Q4 2021. Expect prices to stabilise towards Q1 / Q2 2022.



Infineum Set to Increase Lubricant Additive Prices

Infineum advised customer that it will be implementing a general lubricant additive price increase of up to 8%, effective November 1, 2021. The increase is said to impact most of the lubricant additives manufactured and supplied globally by Infineum. According to a number of blenders JW spoke with, they have been advised that the price increase is necessary due to continuing pressure on raw material cost and the ongoing challenges present in global supply chains.

Key raw materials impacting Additives cost

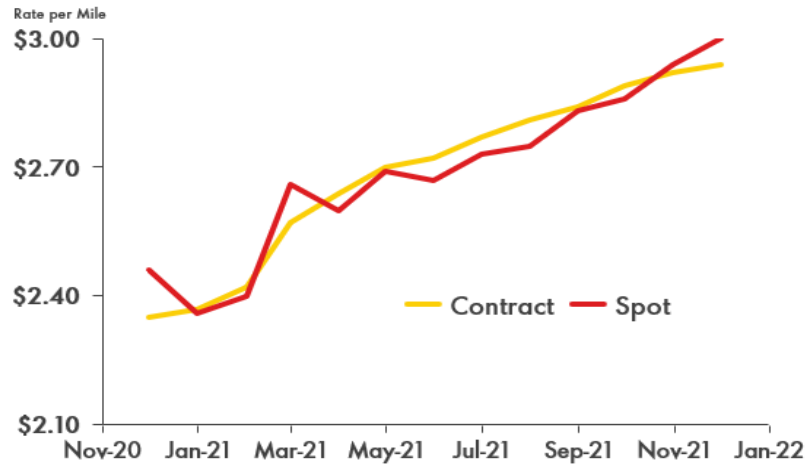


Observation & inferences

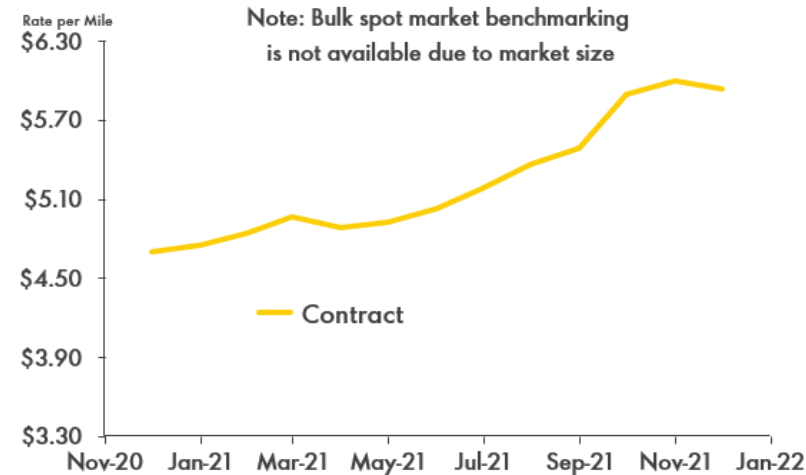
- ❑ Q3 2020 has been considered as the baseline (100%) for the above analysis.
- ❑ Since June 2021, Additives' raw material costs have seen sharp increases (of around 22% to 70%) in hydrocarbons like maleic anhydride, butane, ethylene and commodities like caustic soda. Cost for BO has risen by 5-7%. However, we also see small decrease in prices (1%-9%) for hydrocarbons like Benzene, alcohols and commodities like Sulphur.
- ❑ Ethylene and propylene prices are expected to stabilise and may decrease in Q4, and this will have an impact on other components that derive from it. However, raw material shortages may impact the cost.
- ❑ Hydrocarbon commodities like Butane, Ethylene, Propylene, & base oils constitute a major share of cost compare to the other commodities.

Logistics Freight Rate Snapshot

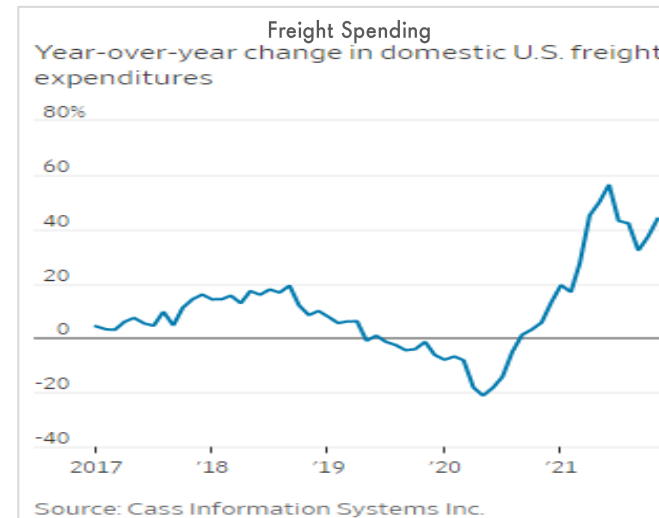
Pack RPM Marker: DAT National Avg (LH + Fuel)



Bulk RPM Marker: National Avg (LH + Fuel)



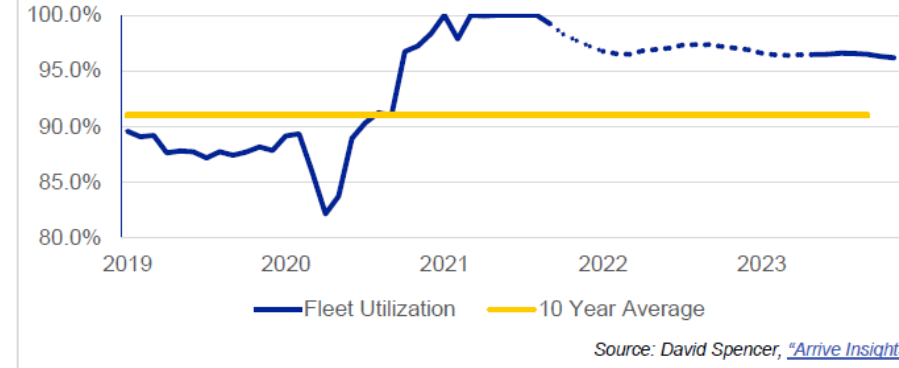
Outlook: Transportation rates continue to escalate 2% - 5% every month with strong consumer demand and constrained supply chain capacity across multiple sectors. Prices have been rising across the freight sector, including in parcel delivery, trucking, ocean shipping and warehousing. This trend is expected to extend well into 2022.



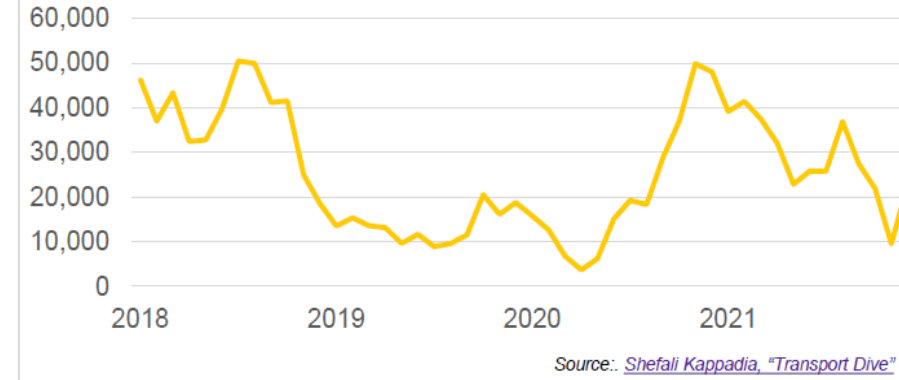
Freight

- Active Truck Utilization sees some improvement in the forecast but not much; still above 96% into 2023
- Class 8 truck orders at 23,100 in December (139% from November) indicating more confidence in the market. However, production is still constrained by the supply chain limiting the amount of new orders
- Diesel continues to increase, per the EIA

Active Truck Utilization Outlook

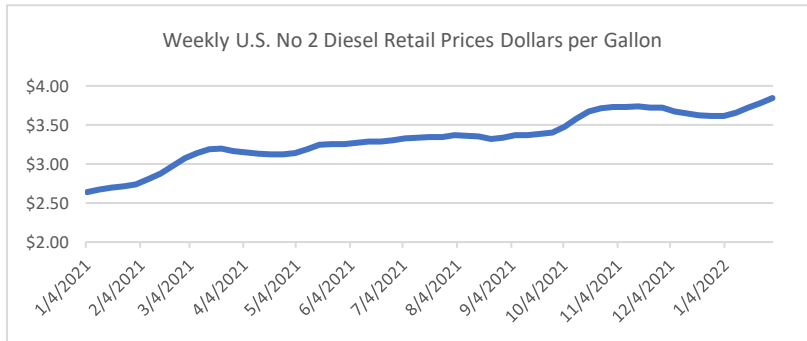


Class 8 Truck Orders in North America



U.S. On-Highway Diesel Fuel Prices*(dollars per gallon)

	01/17/22	01/24/22	01/31/22	Change from week ago	Change from year ago
U.S.	3.725	3.780	3.846	↑ 0.066	↑ 1.108



US Inflation and Supply Chain

- U.S. inflation accelerates to a 7% high
- Shelter (4.1%), food (6.3%), food at home (6.5%), new vehicles (11.8%), used cars and trucks (37.3%), apparel (5.8%), and medical care services (2.5%).
- Inflation increase due to supply chain constraints, elevated energy costs and labor shortages

Survey: Supply Chain Problems Persist

BY TIM SULLIVAN

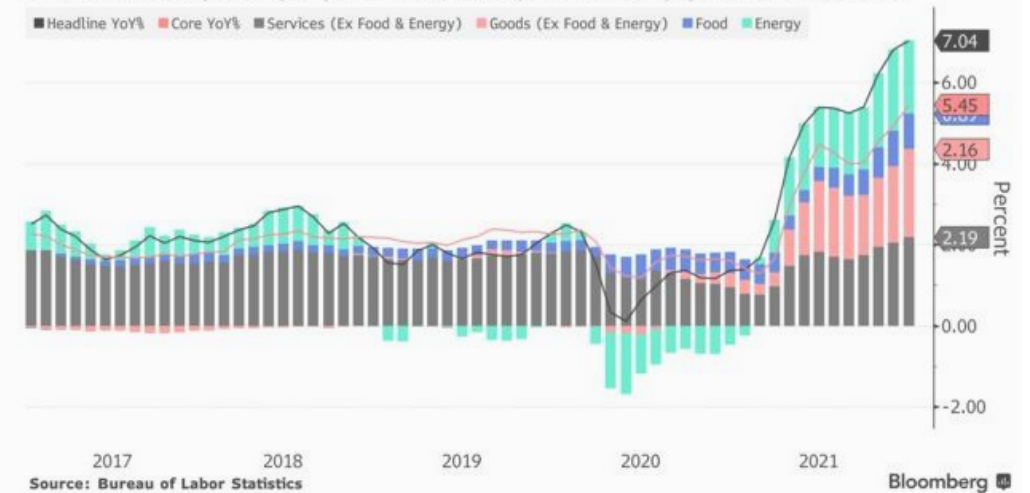
Chemical manufacturers in the United States reported that supply chain disruptions are persisting and in some cases worsening, causing them to incur significant expenses in shipping delays and lost business, according to a survey conducted by the American Chemistry Council late last year. The trade group predicted that the problems will continue well into 2022 and called for federal government action to alleviate the situation.

[Read More](#)

Survey: Supply Chain Problems Persist - Lubes'N'Greases (lubesngreases.com)

New Heights

U.S. consumer prices jumped in December, bolstered by goods and services



Viewpoint: Supply chain issues to weigh on US base oils

Published date: 30 December 2021 **The US base oil market in the first half of 2022 is expected to face increased tightness, higher prices and logistics challenges stemming from supply chain disruptions.**

Share:



Source: <https://www.argusmedia.com/en/news/2287870-viewpoint-supply-chain-issues-to-weigh-on-us-base-oils>



Grease Increases

The current huge demand for lithium from the automotive industry has resulted in a steep price increase for Lithium Hydroxide. Also, prices of synthetic base oils, both PAO and synthetic esters, like even Moly have raised further and the same applies for many additives and packages.

Due to the high inflation rates (+3,1% in October 2021 vs. October 2020) and union agreements (+3,8%). Energy and transportation costs are still increasing, resulting currently to all time high levels.

In US, Cost of Living Adjustment (COLA) for 2022 has increased by 5,9% during 2021 and adding even huge increases of health insurance and energy costs, AXEL proposes an 8% manufacturing and filling fee increase.

Important Dates

The next steps:

Action	Date
TPE Instructions and templates available	January 1, 2022
TPE's due from sales	February 9, 2022
New Prices loaded into GSAP	February 14, 2022
Price Schedules available	February 14, 2022
Prices available AUREUS	February 14, 2022

