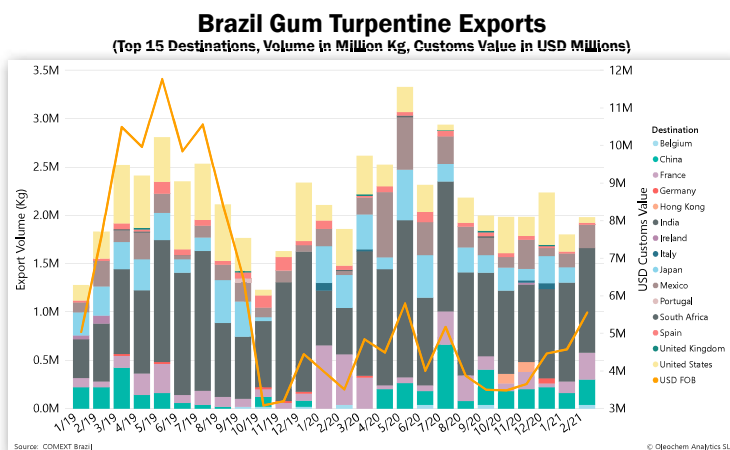


GUM TURPENTINE - CONTINUED

that the production volumes of gum rosin and gum turpentine will continue at current levels.

In February, export volumes were higher and the customs value per MT continued to tick up-wards.



ROSIN ESTERS & C5 HYDROCARBON RESIN

The rosin ester industry faced slimming margins as production cost increased in March. Some derivatives producers had to purchase raw material at high prices as imported gum rosin saw lower volumes. Meanwhile, demand of rosin ester was improved due to economic recovery in China.

Hydrocarbon resins remained very competitive against rosin esters, but hydrocarbon resin is difficult to totally replace rosin esters as there are different chemical properties between them.

In the south of China, gum rosin glycerol ester (gum rosin *P. elliptii* based) was quoted at RMB 14,600/Mt (\$2,232/Mt) EXW. Quotes for gum rosin pentaerythryl ester (gum rosin *P. elliptii* based) were at RMB 14,950/Mt (\$2,286/Mt) EXW.

Gum rosin prices are expected to remain firm for the next few months, forcing rosin ester producers to pay higher prices and squeezing margins.

The hydrocarbon resin market saw stability in March as supply was sufficient. Demand was healthy, especially for adhesive hydrocarbon resin. The road-marking hydrocarbon resin market was soft due to sufficient supply and limited demand.

At the end March in north east China C5 hydrocarbon resin into road marking applications prices was around RMB 10,500 /Mt (\$1,606/Mt) EXW. C5 hydrocarbon resin into the adhesives traded at around RMB 12,400/Mt (\$1,896/Mt) EXW.

Looking ahead, firm crude oil and high petrochemicals prices will provide upward price pressure on for the hydrocarbon resin market in China.

CHINA TRADE BALANCE FOCUS

2020 Chinese Import and Export Balance

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China's pine chemicals import and export trade balance for 2020 moved into negative territory for the first time with import values outpacing export values. The trade balance for 2018, and 2019 were positive at \$9.5 million, and \$72.6 million, respectively. We expect that the negative trade balance will steadily grow in the years to come.

The country imports pine oleoresin (130190), turpentine (380510) and gum rosin (380610), from Vietnam, Indonesia, Brazil, and Argentina. Additionally, China imports rosin resins derivatives (380630+) from the US. Small quantities of tall oil rosin (380300) are imported from USA and Brazil. Imports totaled over \$300 million in 2020.

2020 Chinese Imports [USD]

	130190	380300	2020 Chinese Imports [USD]			2020 Balance [USD]
			380510	380610	380630+	Tot. Imp.
South Korea						31,303,100
Japan					(11,075,782)	28,099,378
Taiwan					(1,687,504)	15,850,977
Malaysia						8,969,858
Tailand						7,764,420
ROW						(30,548,075)
Argentina			(1,591,833)	(1,914,050)		(13,451,618)
USA		(6,354,307)	(99,548)	(5,309,290)	(44,756,956)	(52,411,259)
Brazil	(3,351,348)	(2,216,801)	(4,624,490)	(39,448,230)	(4,504,112)	(54,013,395)
Indonesia	(6,548,224)		(4,806,998)	(57,045,570)		(55,812,634)
Vietnam	(364,826)		(7,288,886)	(57,062,790)		(60,697,822)
Imports						(300,599,620)
						(122,219,730)

Chinese exports of pine chemicals are generally directed to Asian countries and comprise turpentine (380510), gum rosin (380610) and rosin resins (380630+). Exports in 2020 totaled around \$178 million. Chinese gum rosin exported is of the species *P. massoniana*.

2020 Chinese Exports [USD]

	380510	380610	380630+	Tot. Exp.
South Korea		2,300,878	29,002,222	31,303,100
Japan	503,210	11,409,455	27,262,495	39,175,160
Taiwan		3,537,517	14,000,964	17,538,481
Malaysia	1,081,121	629,414	7,259,323	8,969,858
Tailand	298,136	936,611	6,529,673	7,764,420
ROW				52,727,340
Argentina			54,265	54,265
USA		1,191,264	2,917,578	4,108,842
Brazil			131,586	131,586
Indonesia	7,645,055		4,943,103	12,588,158
Vietnam	13,596	57,970	3,947,114	4,018,680
Exports				178,379,890

CTO & TOFA

Americas

Tall oil fatty acids (TOFA) were assessed higher for April after also moving higher in January and March to reflect upward price pressure because of strengthening demand across some sectors,