
NAVAL STORES

ANNUAL SUMMARY

Preliminary 1979

Revised 1978



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TURPENTINE PRODUCTION UP, STOCKS DOWN

Domestic turpentine production during the year beginning April 1, 1979 totaled 528 thousand barrels, up 4 percent from the previous year. Production of sulfate turpentine increased 5 percent, but steam distilled production was about the same as the previous year. Gum turpentine was down 31 percent, compared with a year earlier. Turpentine stocks at all levels except retail totaled 73.3 thousand barrels on March 31, 1980, down 2 percent from a year ago. Stocks of sulfate turpentine increased 3 percent, steam distilled stocks were down 23 percent, and gum stocks dropped 2 percent from March 31, 1979.

Apparent consumption of turpentine totaled 523 thousand barrels, up 2 percent from 1978. Reported industrial consumption during 1979 was about the same as during 1978.

ROSIN PRODUCTION UP, STOCKS DOWN

United States production of rosin totaled 1.36 million drums during the year beginning April 1, 1979. This was a 2 percent increase from the previous year. Tall oil production was up 7 percent, but steam distilled declined 6 percent, and gum rosin production fell 30 percent. Stocks at all levels except retail totaled 138 thousand drums on March 31, 1980, down 36 percent from a year earlier. Stocks of tall oil rosin were down 39 percent, steam distilled stocks fell 42 percent, and gum rosin declined 7 percent.

Apparent consumption of rosin totaled 1.10 million drums for the year beginning April 1, 1979, up 1 percent from the previous year. Reported industrial consumption for the same period was down 9 percent.

PRICES OF BOTH GUM TURPENTINE AND ROSIN INCREASE

The season average price of gum turpentine was \$2.04 per gallon for 1979, up 42.6 cents from the previous year. The season average price of gum rosin (all grades) increased \$7.51 to \$35.05 per 100 pounds for 1979. The price of crude gum increased \$12.19 from last year and averaged \$80.01 per barrel for 1979.

EXPLANATORY NOTES

This publication contains revised 1978 and preliminary 1979 data. It includes monthly exports and imports of turpentine and rosin. All annual data relate to the crop year beginning April 1 and ending March 31 of the following year.

Sulfate turpentine statistics are on a refined equivalent basis. Production is reported on a crude basis and is multiplied by a factor of 0.80 to convert to a refined basis. Stocks include refined stocks (primarily for sale) as reported, and all crude stocks multiplied by the 0.80 adjustment factor.

Sulfate turpentine stocks published monthly are listed under production plant stocks in the supply and distribution tables. Annually, companies which process and/or consume sulfate turpentine are surveyed. Crude and refined stocks (not necessarily for sale) reported by these companies are summarized under the industrial plant category. However, some of these firms are also production plants. To avoid duplication, their monthly stocks have been removed from the production plant category for the annual report.

TURPENTINE AND ROSIN: REPORTED CONSUMPTION BY INDUSTRIES, 1978-79

ITEM	TURPENTINE		ROSIN 1/	
	1978	1979	1978	1979
	50 GALLON BARRELS		DRUMS 2/	
CHEMICALS AND RUBBER	496,840	497,720	362,100	353,650
ESTER GUMS AND SYNTHETIC RESIN	3/	3/	233,130	268,020
PAINT, VARNISH, AND LACQUER	650	410	19,440	21,660
PAPER AND PAPER SIZE	3/	3/	463,610	352,510
OTHER INDUSTRIES	7,780	6,180	89,540	68,690
TOTAL	505,270	504,310	1,167,820	1,064,530

1/ INCLUDES B-WOOD RESIN. 2/ WOOD ROSIN IN DRUMS OF 520 POUNDS NET. GUM ROSIN IN DRUMS OF 517 POUNDS. 3/ INCLUDED IN OTHER INDUSTRIES TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TURPENTINE: EXPORTS AND IMPORTS, 1979 1/

MONTH	EXPORTS				IMPORTS		
	GUM	STEAM DISTILLED	SULFATE	TOTAL	GUM	OTHER	TOTAL
	50 GALLON BARRELS						
APR	30	160	620	810	0	0	0
MAY	40	6,180	280	6,500	1,540	10	1,550
JUN	20	60	1,520	1,600	780	0	780
JUL	20	40	110	170	160	0	160
AUG	50	230	310	590	1,000	0	1,000
SEP	130	170	60	360	1,130	0	1,130
OCT	80	150	430	660	540	0	540
NOV	40	60	680	780	940	10	950
DEC	30	40	510	580	530	0	530
JAN	10	10	180	200	0	0	0
FEB	50	50	600	700	540	0	540
MAR	50	40	450	540	610	60	670
TOTAL	550	7,190	5,750	13,490	7,770	80	7,850

1/ AS REPORTED BY THE BUREAU OF THE CENSUS.

ROSIN: EXPORTS AND IMPORTS, 1979 1/
PINE OIL: EXPORTS, 1979

MONTH	EXPORTS				IMPORTS			EXPORTS
	GUM	STEAM DISTILLED	TALL OIL	TOTAL	GUM	OTHER	TOTAL	PINE OIL
	DRUMS							50 GAL BBL
APR	2,180	6,340	23,020	31,540	2,560	0	2,560	11,250
MAY	2,500	12,090	30,520	45,110	2,460	0	2,460	11,380
JUN	1,830	7,780	22,840	32,450	5,190	100	5,290	13,410
JUL	1,250	6,520	33,650	41,420	4,330	0	4,330	17,080
AUG	1,030	6,960	17,600	25,590	2,510	0	2,510	6,810
SEP	1,560	5,900	16,660	24,120	2,980	0	2,980	24,940
OCT	1,930	6,880	22,640	31,450	3,010	10	3,020	10,850
NOV	1,090	13,820	18,960	33,870	5,660	10	5,670	11,470
DEC	1,440	14,710	23,160	39,310	6,340	0	6,340	25,430
JAN	1,130	7,660	22,600	31,390	2,590	2,900	5,490	19,790
FEB	1,400	6,650	21,180	29,230	3,020	0	3,020	17,210
MAR	1,100	11,670	17,850	30,620	7,950	240	8,190	23,720
TOTAL	18,440	106,980	270,680	396,100	48,600	3,260	51,860	193,340

1/ AS REPORTED BY THE BUREAU OF THE CENSUS.

TURPENTINE: SUPPLY AND DISTRIBUTION, 1978

ITEM	GUM	STEAM DISTILLED	SULFATE	TOTAL
BARRELS OF 50 GALLONS				
<u>SUPPLY</u>				
PRODUCTION - APR	600	4,120	39,360	44,080
MAY	850	4,430	37,880	43,160
JUN	1,240	4,300	36,030	41,570
JUL	1,220	3,710	32,690	37,620
AUG	1,110	3,290	34,350	38,750
SEP	1,070	4,190	33,100	38,360
OCT	810	3,170	38,690	42,670
NOV	850	3,940	37,990	42,780
DEC	580	3,180	34,940	38,700
JAN	400	4,950	40,950	46,300
FEB	540	4,570	40,650	45,760
MAR	470	3,740	43,780	47,990
TOTAL	9,740	47,590	450,410	507,740
STOCKS BEGINNING OF YEAR 1/	4,760	21,920	64,190	90,870
IMPORTS 2/	6,530	570		7,100
AVAILABLE SUPPLY	21,030	70,080	514,600	605,710
<u>DISTRIBUTION</u>				
STOCKS END OF YEAR				
PRODUCTION PLANTS	1,010	10,020	19,110	30,140
INDUSTRIAL PLANTS	530	360	39,270	40,160
DISTRIBUTION POINTS	1,730	2,470	100	4,300
TOTAL	3,270	12,850	58,480	74,600
EXPORTS	600	9,620	5,090	15,310
APPARENT CONSUMPTION	17,160	47,610	450,980	515,750
TOTAL DISTRIBUTION	21,030	70,080	514,550	605,660
REPORTED INDUSTRIAL CONSUMPTION	1,530	34,960	468,780	505,270

1/ AT ALL POSITIONS EXCEPT RETAIL.

2/ AS REPORTED BY THE BUREAU OF THE CENSUS. IMPORTS ARE REPORTED AS "GUM" AND "OTHER". ALL "OTHER" IMPORTS ARE LISTED UNDER STEAM DISTILLED.

TURPENTINE: SUPPLY AND DISTRIBUTION, 1979

ITEM	GUM	STEAM DISTILLED	SULFATE	TOTAL
BARRELS OF 50 GALLONS				
<u>SUPPLY</u>				
PRODUCTION - APR	520	4,090	39,920	44,530
MAY	770	4,670	40,780	46,220
JUN	820	2,830	38,660	42,310
JUL	850	4,080	34,910	39,840
AUG	870	2,610	37,130	40,610
SEP	770	5,050	34,720	40,540
OCT	460	3,840	42,000	46,300
NOV	550	4,460	38,310	43,320
DEC	370	3,890	37,210	41,470
JAN	150	4,360	43,230	47,740
FEB	370	3,440	43,310	47,120
MAR	240	4,400	43,180	47,820
TOTAL	6,740	47,720	473,360	527,820
STOCKS BEGINNING OF YEAR 1/	3,270	12,850	58,480	74,600
IMPORTS 2/	7,770	80		7,850
AVAILABLE SUPPLY	17,780	60,650	531,840	610,270
<u>DISTRIBUTION</u>				
STOCKS END OF YEAR				
PRODUCTION PLANTS	650	7,380	11,500	19,530
INDUSTRIAL PLANTS	400	300	48,340	49,040
DISTRIBUTION POINTS	2,160	2,230	340	4,730
TOTAL	3,210	9,910	60,180	73,300
EXPORTS	550	7,190	5,750	13,490
APPARENT CONSUMPTION	14,020	43,550	465,910	523,480
TOTAL DISTRIBUTION	17,780	60,650	531,840	610,270
REPORTED INDUSTRIAL CONSUMPTION	1,120	37,120	466,070	504,310

1/ AT ALL POSITIONS EXCEPT RETAIL.

2/ AS REPORTED BY THE BUREAU OF THE CENSUS. IMPORTS ARE REPORTED AS "GUM" AND "OTHER". ALL "OTHER" IMPORTS ARE LISTED UNDER STEAM DISTILLED.

ROSIN: SUPPLY AND DISTRIBUTION, 1978

ITEM	GUM	STEAM DISTILLED	TALL OIL	TOTAL
DRUMS 1/				
<u>SUPPLY</u>				
PRODUCTION - APR	2,330	43,790	72,190	118,310
MAY	2,890	42,360	78,150	123,400
JUN	3,740	36,600	72,640	112,980
JUL	3,960	37,370	64,460	105,790
AUG	3,580	31,100	66,850	101,530
SEP	3,790	40,400	74,630	118,820
OCT	2,910	38,260	63,790	104,960
NOV	3,460	40,120	68,770	112,350
DEC	1,940	31,500	63,800	97,240
JAN	1,910	39,320	69,370	110,600
FEB	2,220	40,220	73,080	115,520
MAR	1,860	39,230	76,000	117,090
TOTAL	34,590	460,270	843,730	1,338,590
STOCKS BEGINNING OF YEAR 1/	21,440	40,980	169,830	232,250
IMPORTS 2/	40,990	13,670		54,660
AVAILABLE SUPPLY	97,020	514,920	1,013,560	1,625,500
<u>DISTRIBUTION</u>				
STOCKS END OF YEAR				
PRODUCTION PLANTS				
CCC CONTROLLED	0			0
OTHER	3,070	17,990	113,220	134,280
INDUSTRIAL PLANTS	13,070	8,640	55,430	77,140
DISTRIBUTION POINTS	4,050	140	60	4,250
TOTAL	20,190	26,770	168,710	215,670
EXPORTS 2/	18,320	99,410	210,080	327,810
APPARENT CONSUMPTION	58,510	388,740	634,770	1,082,020
TOTAL DISTRIBUTION	97,020	514,920	1,013,560	1,625,500
REPORTED INDUSTRIAL CONSUMPTION	64,010	345,310	758,500	1,167,820

1/ GUM ROSIN IN DRUMS OF 517 POUNDS. WOOD ROSIN IN DRUMS OF 520 POUNDS NET.
 2/ AS REPORTED BY THE BUREAU OF THE CENSUS. IMPORTS ARE REPORTED AS "GUM"
 AND "OTHER". ALL "OTHER" IMPORTS ARE LISTED UNDER STEAM DISTILLED.

ROSIN: SUPPLY AND DISTRIBUTION, 1979

ITEM	GUM	STEAM DISTILLED	TALL OIL	TOTAL
DRUMS 1/				
<u>SUPPLY</u>				
PRODUCTION - APR	2,090	40,810	74,020	116,920
MAY	2,530	43,480	81,720	127,730
JUN	2,900	32,220	90,400	125,520
JUL	2,700	37,050	64,130	103,880
AUG	2,720	26,000	65,550	94,270
SEP	2,410	37,490	73,850	113,750
OCT	1,630	37,060	79,730	118,420
NOV	2,520	38,380	80,520	121,420
DEC	1,590	34,940	78,880	115,410
JAN	990	33,660	67,130	101,780
FEB	1,170	34,740	77,690	113,600
MAR	950	37,250	72,500	110,700
TOTAL	24,200	433,080	906,120	1,363,400
STOCKS BEGINNING OF YEAR	20,190	26,770	168,710	215,670
IMPORTS 2/	48,600	3,260		51,860
AVAILABLE SUPPLY	92,990	463,110	1,074,830	1,630,930
<u>DISTRIBUTION</u>				
STOCKS END OF YEAR				
PRODUCTION PLANTS				
CCC CONTROLLED	0			0
OTHER	2,820	9,940	55,520	68,280
INDUSTRIAL PLANTS	14,500	5,350	47,640	67,490
DISTRIBUTION POINTS	1,480	240	210	1,930
TOTAL	18,800	15,530	103,370	137,700
EXPORTS 2/	18,440	106,980	270,680	396,100
APPARENT CONSUMPTION	55,750	340,600	700,780	1,097,130
TOTAL DISTRIBUTION	92,990	463,110	1,074,830	1,630,930
REPORTED INDUSTRIAL CONSUMPTION	40,660	325,320	698,550	1,064,530

1/ GUM ROSIN IN DRUMS OF 517 POUNDS. WOOD ROSIN IN DRUMS OF 520 POUNDS NET.

2/ AS REPORTED BY THE BUREAU OF THE CENSUS. IMPORTS ARE REPORTED AS "GUM" AND "OTHER". ALL "OTHER" IMPORTS ARE LISTED UNDER STEAM DISTILLED.

GUM TURPENTINE AND ROSIN: PRICE AND VALUE, 1978-79 1/

MONTH	TURPENTINE		ROSIN	
	1978	1979	1978	1979
	DOLLARS PER GALLON		DOLLARS PER 100 LBS	
APR	1.522	1.750	26.52	30.77
MAY	1.500	1.800	26.32	28.65
JUN	1.533	1.945	26.35	32.74
JUL	1.550	1.982	27.44	34.82
AUG	1.550	1.908	26.83	34.58
SEP	1.550	2.000	26.90	38.34
OCT	1.600	2.000	27.81	37.70
NOV	1.600	2.232	26.27	35.46
DEC	1.600	2/	28.81	34.60
JAN	1.750	2.250	29.54	37.58
FEB	1.750	2.428	28.54	42.73
MAR	1.766	2/	28.77	40.84
SEASON AVERAGE PRICE	1.610	2.036	27.54	35.05
MARKET VALUE OF PRODUCTION 1,000 DOLLARS				
CROP YEAR TOTAL	784	686	4,925	4,385

1/ FROM MONTHLY REPORTS ISSUED BY MARKET NEWS SERVICE, RALEIGH, N C. PRICE AT PROCESSING PLANTS FOR TURPENTINE IN TANK CARS F.O.B., ALL GRADES OF ROSIN IN DRUMS F.O.B. 2/ NO SALES REPORTED BY MARKET NEWS SERVICE.

COMMERCIAL CRUDE GUM: PRICE AND PARITY PRICE, 1978-79

MONTH	PRICE 1/		PARITY PRICE 2/	
	1978	1979	1978	1979
	DOLLARS PER BARRELS OF 435 LBS			
APR	62.72	69.55	103.00	118.00
MAY	64.59	73.94	104.00	119.00
JUN	67.23	79.13	105.00	119.00
JUL	69.80	82.35	105.00	120.00
AUG	71.44	85.03	105.00	119.00
SEP	71.69	86.19	106.00	121.00
OCT	68.70	68.70	107.00	122.00
NOV	64.65	83.73	107.00	122.00
DEC	63.68	84.95	108.00	123.00
JAN	61.97	85.82	112.00	126.00
FEB	64.27	81.54	114.00	128.00
MAR	62.05	77.75	116.00	130.00
SEASON AVERAGE PRICE	67.82	80.01		

1/ FROM MONTHLY REPORTS ISSUED BY MARKET NEWS SERVICE, RALEIGH, N C. PRICE IS FOR CRUDE GUM DELIVERED. 2/ FROM AGRICULTURAL PRICES ISSUED MONTHLY BY THE CROP REPORTING BOARD, ESCS, USDA, WASHINGTON, D.C.

PINE OIL: PRODUCTION AND STOCKS, 1978-79

MONTH	PRODUCTION		STOCKS 1/	
	1978	1979	1978	1979
BARRELS OF 50 GALLONS				
APR	15,340	14,680	21,610	11,270
MAY	19,260	18,860	22,810	12,330
JUN	16,190	15,940	18,410	14,460
JUL	15,300	16,630	17,080	16,610
AUG	15,140	14,850	15,410	16,240
SEP	18,320	17,200	15,750	14,000
OCT	15,720	15,160	18,240	14,350
NOV	14,510	16,160	11,490	18,450
DEC	17,270	16,190	12,000	16,680
JAN	13,740	15,660	15,000	15,080
FEB	14,190	14,110	12,330	14,560
MAR	17,700	17,260	11,840	17,460
TOTAL	192,680	192,700		

1/ END OF MONTH.

OTHER STEAM DISTILLED TERPENES: PRODUCTION AND STOCKS, 1978-79

MONTH	PRODUCTION		STOCKS 2/	
	1978	1979	1978	1979
BARRELS OF 50 GALLONS				
APR	4,990	5,520	19,740	8,220
MAY	4,000	5,490	19,390	8,150
JUN	3,550	4,760	18,910	9,510
JUL	5,000	5,840	20,030	8,500
AUG	3,200	3,550	19,140	8,320
SEP	4,630	5,270	18,890	7,850
OCT	4,130	5,930	18,640	7,780
NOV	5,820	4,400	6,960	7,620
DEC	2,760	3,770	7,920	9,970
JAN	4,280	4,620	8,260	2,490
FEB	5,090	4,690	6,400	10,880
MAR	5,430	5,230	7,500	10,040
TOTAL	52,880	59,070		

1/ END OF MONTH.

TURPENTINE: STOCKS, 1978-79

END OF MONTH	GUM	WOOD		TOTAL GUM AND WOOD
		STEAM DISTILLED	SULFATE	
BARRELS OF 50 GALLONS				
<u>1978</u>				
APR	800	17,410	54,430	72,640
MAY	700	12,790	58,110	71,600
JUN	1,380	9,760	57,660	68,800
JUL	1,800	11,490	49,430	62,720
AUG	1,530	8,520	49,210	59,260
SEP	1,860	9,070	43,240	54,170
OCT	1,720	8,600	39,430	49,750
NOV	2,250	7,700	43,030	52,980
DEC	1,510	8,470	43,190	53,170
JAN	960	7,670	49,190	57,820
FEB	1,030	8,780	52,500	62,310
MAR	1,010	10,020	49,460	60,490
<u>1979</u>				
APR	1,130	11,710	48,540	61,380
MAY	980	8,980	44,620	54,580
JUN	1,200	6,390	42,320	49,910
JUL	1,040	5,700	43,950	50,690
AUG	1,420	5,210	43,190	49,820
SEP	1,480	6,140	39,180	46,800
OCT	1,250	7,030	41,370	49,650
NOV	1,210	8,280	41,170	50,660
DEC	1,340	7,100	40,330	48,770
JAN	770	5,380	40,190	46,340
FEB	670	9,250	37,500	47,420
MAR	650	7,380	43,230	51,260

ROSIN: STOCKS, 1978-79

END OF MONTH	GUM		WOOD		TOTAL GUM AND WOOD
	CCC	OTHER	STEAM DISTILLED	TALL OIL	
			DRUMS 1/		
<u>1978</u>					
APR	0	4,110	32,340	113,460	149,910
MAY	0	3,810	32,440	119,230	155,480
JUN	0	4,310	32,220	121,270	157,800
JUL	0	4,250	32,350	127,010	163,610
AUG	0	4,950	27,900	134,020	166,870
SEP	0	5,100	28,820	137,380	171,300
OCT	0	4,450	23,580	127,670	155,700
NOV	0	5,810	22,250	117,270	145,330
DEC	0	4,960	19,530	111,260	135,750
JAN	0	4,340	16,230	111,570	132,140
FEB	0	4,370	16,960	109,030	130,360
MAR	0	3,070	17,990	113,220	134,280
<u>1979</u>					
APR	0	2,530	17,210	93,720	113,460
MAY	0	2,720	17,770	101,360	121,850
JUN	0	3,170	18,640	106,130	127,940
JUL	0	4,130	18,770	87,410	110,310
AUG	0	4,470	15,120	81,460	101,050
SEP	0	4,330	16,080	79,050	99,460
OCT	0	4,120	14,490	78,760	97,370
NOV	0	5,340	12,650	83,380	101,370
DEC	0	5,780	15,250	69,210	90,240
JAN	0	4,650	10,780	58,030	73,460
FEB	0	4,060	11,180	61,250	76,490
MAR	0	2,820	9,940	55,520	68,280

1/ GUM ROSIN IN DRUMS OF 517 POUNDS. WOOD ROSIN IN DRUMS OF 520 POUNDS NET.
