

2019

INDUSTRIAL CHEMICAL INDUSTRY: Performance Snapshot Q1/First Quarter

HIGHLIGHTS

- Shipments of Industrial Chemicals increased by 6.4% in the 1st Quarter of 2019 compared to the 1st Quarter in 2018. On a quarter over quarter basis shipments declined by 1% from the 4th Quarter of 2018.
- Exports for industrial chemicals were up 2.2% in the 1st quarter of 2019 compared to 2018. On a quarter over quarter basis exports decreased by 1.3% from the 4th Quarter of 2018.
- Industrial chemical GDP contracted by 1.4% in the first Quarter of 2019.
- Quarter over quarter rail car shipments were flat in the first Quarter of 2019.



CHEMISTRY INDUSTRY
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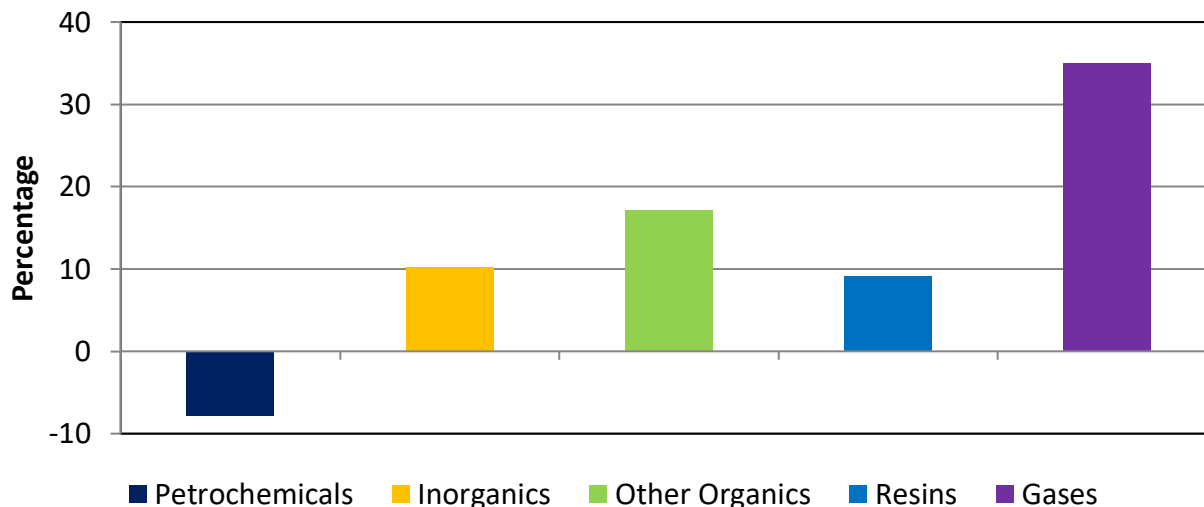


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> Shipments

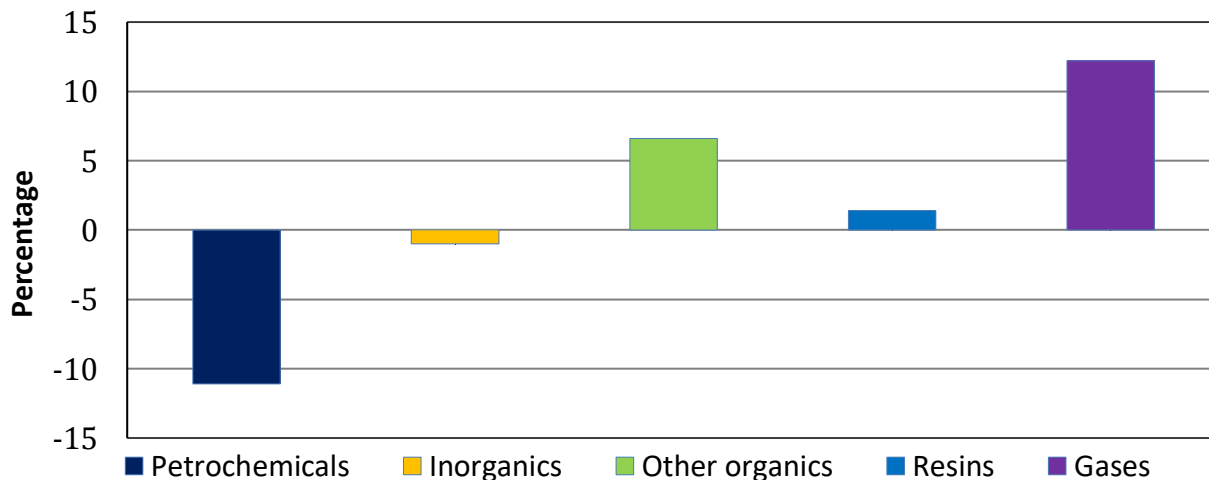
Shipments in dollar terms for the Industrial Chemical industry increased by 6.4% in Q1 2019 compared to Q1 2018. Four out of five sub-sectors showed strong growth in Q1 2019. Industrial Gases (35%) Other Organic Chemicals (17.2%) and Inorganic Chemicals (10.2%) showed the strongest gains year over year. Resin shipments also grew by 9.1%. Petrochemical shipments were the only subsector to register a decline year over year, with shipments dropping by 7.8%.

Figure 1: Change in Shipment Value, Q1 2019 v Q1 2018, %



On a quarter over quarter basis we see Industrial Chemical shipments slipping by 1% from Q4 2018. The Petrochemical subsector saw the largest quarterly decline dropping by 11.1% while Inorganic Chemicals also showed a small dip of 1%. Industrial Gas shipments led growth among subsectors advancing 12.2% while Other Organic Chemicals advanced by 6.6%. Resins shipments also grew albeit modestly, up 1.4% in Q1 2019.

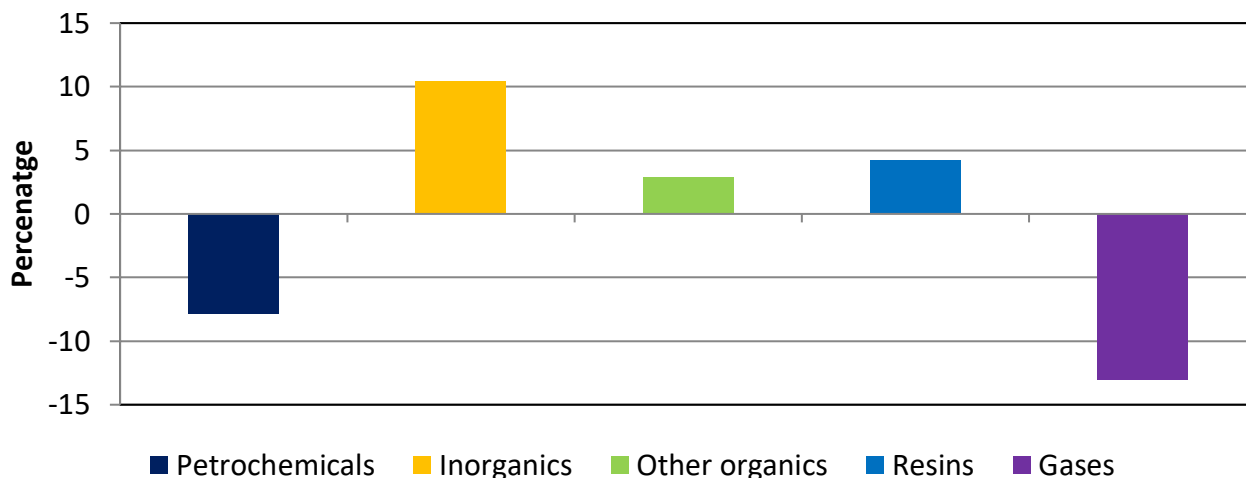
Figure 2: Change in Shipment Value, Q1 2019 v Q4 2018, %



> Exports

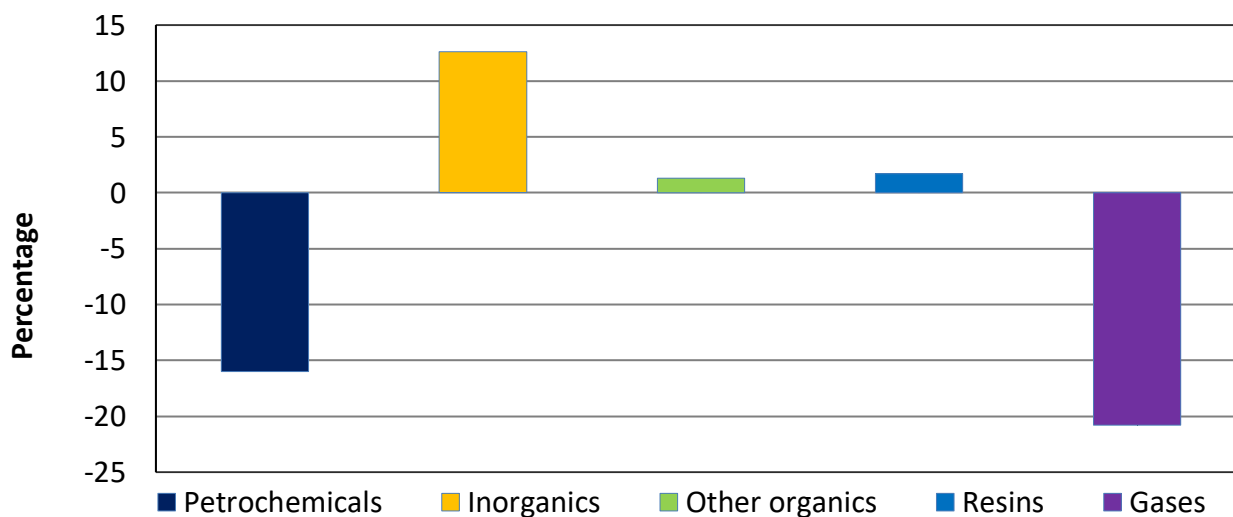
Exports from the Industrial Chemical industry were up 2.2% in the 1st quarter of 2019 compared to the same period in 2018. Inorganic chemicals showed the strongest year over year growth at 10.4%, while Other Organic Chemical and Resin exports increased by 2.9% and 4.2% respectively. Both Petrochemicals (-7.8%) and Industrial Gas (-13%) saw significant declines in exports year over year.

Figure 3: Change in Exports, Q1 2019 v Q1 2018, %



On a quarter over quarter basis, Industrial Chemical exports were down 1.3% from Q4 2018, closely resembling the percentage decrease seen in Shipment values in Figure 2. Industrial Gas exports led the decrease, declining by 20% and were closely followed by Petrochemicals where exports dropped by 16%. These declines were offset to a degree by growth in the Inorganic Chemicals (12.6%), Other Organic Chemicals (1.3%) and Resins (1.7%) subsectors.

Figure 4: Change in Exports, Q1 2019 v Q4 2018, %



Changes in export volumes and dollar values for specific commodities on a year over year basis are shown in Table 1.

Table 1: Change in Exports of Selected Commodities, Q1 2019 v Q1 2018, %

Commodity	change, tonnage basis, %	change, \$ basis, %
<i>Petrochemicals</i>		
Propylene	-8.6	-5.8
Butadiene	8.4	13.9
Higher olefins	19.4	21.5
Benzene	116.8	59.1
Styrene	-4.6	-25.3
<i>Inorganic Chemicals</i>		
Chlorine	31.9	63.3
Hydrochloric acid	-6.8	5.6
Sulphuric acid	-3.7	23
Sodium hydroxide	1.6	-23.7
Titanium dioxide	257	195
Sodium chlorate	-6	4.9
Aluminum sulphate	-48	-23.1
Sodium silicates	35.8	22.8
Hydrogen peroxide	20.2	19.8
<i>Other Organic Chemicals</i>		
Methanol	19.1	15.4
Isopropyl alcohol	55.1	76.7
Ethylene glycol	6.3	-18.7
<i>Synthetic Resins</i>		
Polyethylenes	-8.4	-4.9
Butyl rubbers	-15.8	1.4
<i>Specialty Chemicals</i>		
Palmitates and Stearates	-7.4	8.4
Orthophthalates	-50.2	-34.7
Azo compounds	-20.6	35.1
Cyanine dyes	-12.9	1.4
Azo dyes	-13.4	35.9

Petrochemicals had a mixed quarter on a year over year basis. Both tonnage and pricing metrics were strong for several products but weakness in Propylene and Styrene are notable. Inorganic Chemicals and Other Organic Chemicals both had strong quarters year over year. Synthetic Resins are down on a year over year basis, but Table 2 below may offer better insight into trends for this subsector. Weakness is seen across the board for Specialty Chemicals on a volume basis, but the value of these commodities remained strong aside from Orthophthalates.



Below in Table 2 we can see the different values on a quarter by quarter basis with some differences from the year over year figures.

Table 2: Change in Exports of Selected Commodities, Q1 2019 v Q4 2018, %

Commodity	change, tonnage basis, %	change, \$ basis, %
<i>Petrochemicals</i>		
Propylene	-18.8	-24.1
Butadiene	24.6	25.1
Higher olefins	-2.6	-22.5
Benzene	116.8	59.1
Styrene	-1.1	-18.2
<i>Inorganic Chemicals</i>		
Chlorine	14.4	26.7
Hydrochloric acid	-13.8	-1.1
Sulphuric acid	-5.8	-5.2
Sodium hydroxide	10.7	-35
Titanium dioxide	-45.7	-51.2
Sodium chlorate	-6.4	-4.3
Aluminum sulphate	-13.1	No Change
Sodium silicates	97.3	55.7
Hydrogen peroxide	13	4.2
<i>Other Organic Chemicals</i>		
Methanol	-5.7	-11.7
Isopropyl alcohol	14.3	8.4
Ethylene glycol	1	-15.9
<i>Synthetic Resins</i>		
Polyethylene's	-6.4	No Change
Butyl rubbers	-15.3	-10.4
<i>Specialty Chemicals</i>		
Palmitates and Stearates	8.8	3.4
Orthophthalates	200	219
Azo compounds	-16.7	40
Cyanine dyes	11	11.6
Azo dyes	108	113

In Petrochemicals pockets of weakness can be seen in the value of several products, with Benzene been a strong outlier showing very large positive jumps in volume and value. The overall pricing weakness for select Petrochemicals, adds some depth to the drop in aggregate Petrochemical exports seen in Figure 4. The quarter for Inorganic Chemicals was mixed, with some products showing large swings in value and tonnage on a year over year basis. The aggregate figures seen in Tables 3 and 4 show overall gains so no conclusions can be drawn about the subsector from the Chemistry Industry Association of Canada's (CIAC's) list of select commodities. The figures for Individual Organic Chemical exports more closely resemble the slight increase seen in Figure 4.

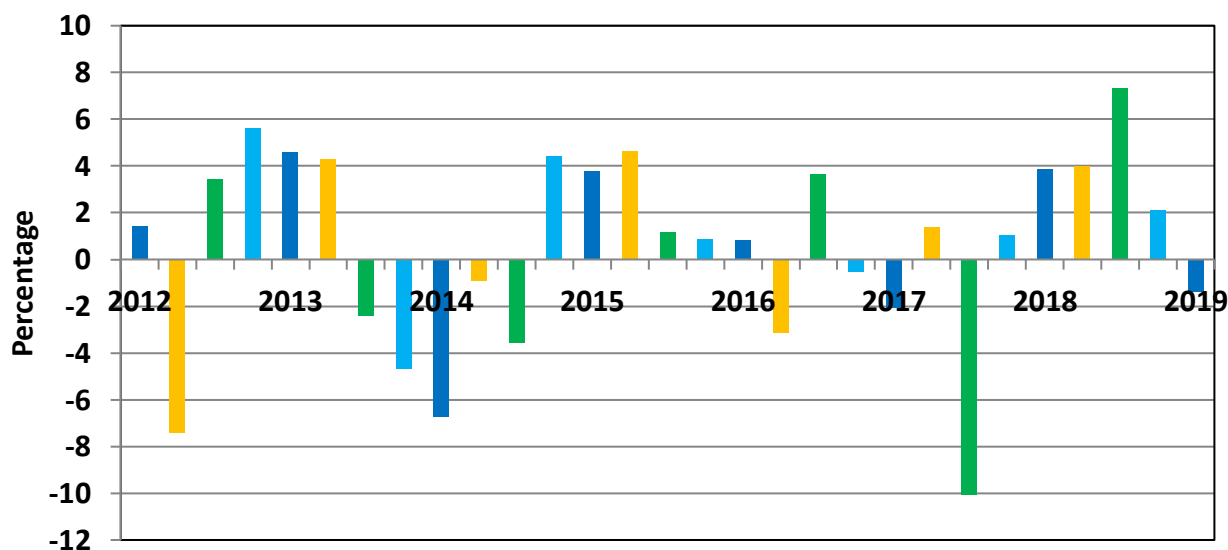


For Synthetic Resins we see that despite a dip from the levels seen in Q1 2018, Polyethylene pricing has held firm from Q4 2018 while Butyl Rubber products have declined on both volume and value terms, which is a divergence from the year over year trends seen in Table 1 but also shows relative stability in the Resins sector seen in Figures 1 and 2. For Speciality Chemicals Q1 2019 was much stronger than Q4 2018 across all products CIAC tracks, however, as seen in Table 1 these products have softened in a year over year basis.

> Gross Domestic Product (GDP)

GDP for Industrial Chemicals declined by 1.4% in the 1st quarter of 2019 compared the last quarter of 2018. This is the first decline in quarterly GDP since the 3rd quarter of 2017. Given that the GDP figure is an aggregate calculation of the different subsectors seen in Figures 1-4, we can estimate that the weakness seen in the Petrochemical subsector and the relative stasis of the Synthetic Resins subsector, have weighed on the overall performance of Industrial Chemicals in Q1 2019. Transportation issues due to inclement weather in February were also a likely contributing factor.

Figure 5: Quarter-Over-Quarter Change in GDP for Industrial Chemicals, %

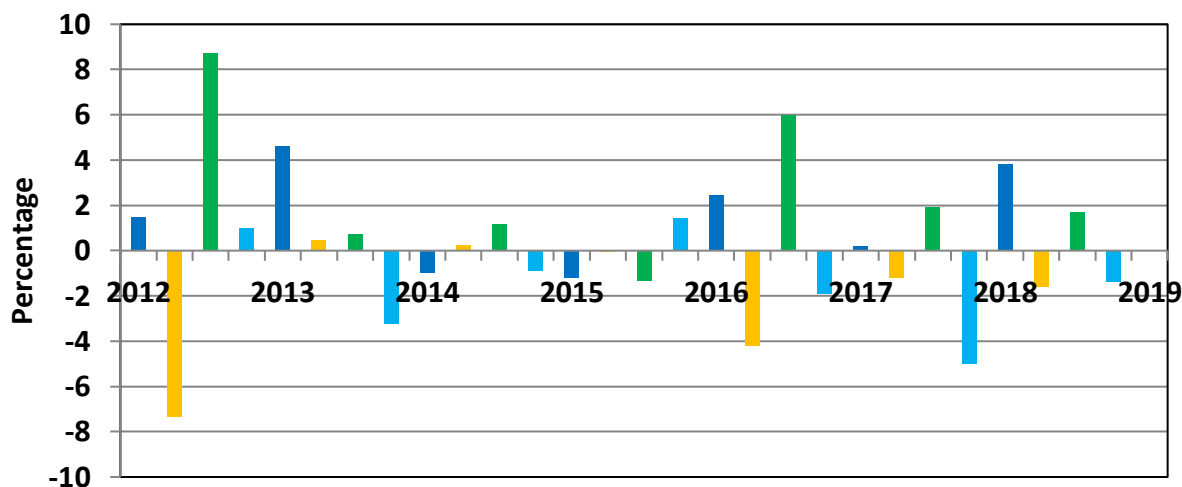


An important point to remember is that while the quarterly figure for Q1 has shown a decrease, the overall performance of the industrial chemicals sector is still, on an aggregate basis, at multi-year highs for this time of year. Compared to Q1 2018, Industrial Chemical GDP from Q1 2019 is 12.4% higher, going back one more year to Q1 2017 GDP in Q1 2019 is 7.6% higher. On an aggregate basis Canada's Industrial Chemical sector is performing at a very high level. This is evidenced by Figure 7, under the Profit section below.

> Rail Car Shipments

The number of rail cars used to ship industrial chemicals (Figure 6) were essentially the same from what we saw in Q4 2018. The lower railcar numbers (as well as the drop in Q1 2019 GDP seen in Figure 5) are likely reflections of the well publicized transportation slowdowns in Western Canada caused by severe winter weather in Q4 2018 and Q1 2019.

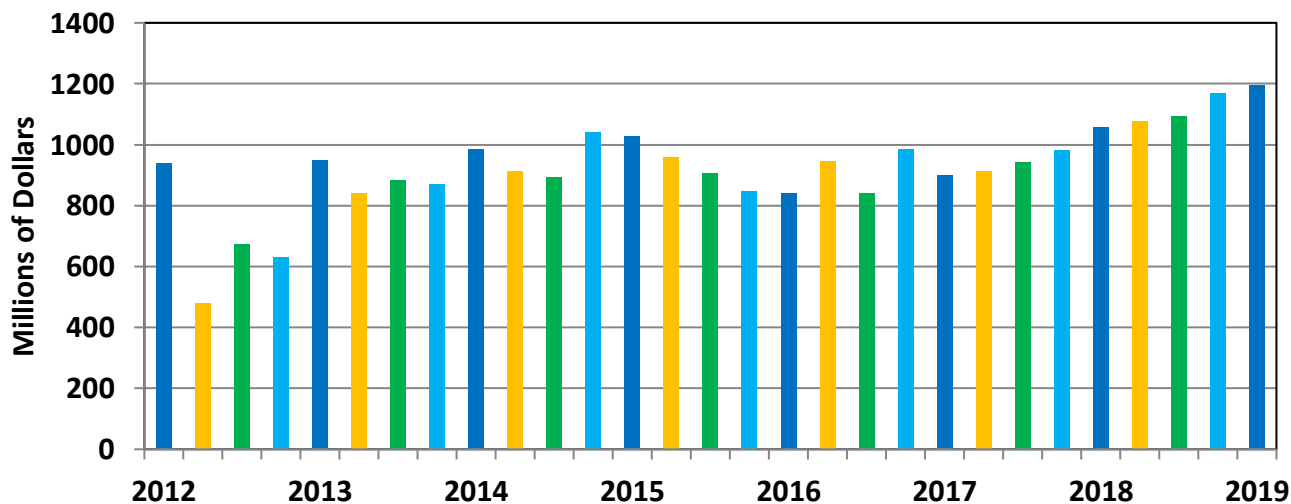
Figure 6: Quarter-Over-Quarter Change in Rail Cars Shipping Industrial Chemicals, %



> Profits

Operating profits (Figure 7) for industrial chemicals in the 1st quarter were \$1196 million, up slightly from the 4th quarter of 2018 and represent the 8th consecutive quarterly increase in profits. The last four quarters have all set new records for quarterly profit with the first quarter of 2019 being the highest yet.

Figure 7: Quarterly operating profits for industrial chemicals, \$ million



Note: All data in this report are based on Statistics Canada sources

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