

## Sector Thematic

# Fluorination

### Fluorine reacting fantastically!

Fluorinated organic compounds are of particular interest in the field of pharmaceuticals and agrochemicals. Fluoro-pharmaceuticals and fluoro-agrochemicals find their application in drugs and pesticides. Nearly 20% of pharmaceutical compounds and 34% of agrochemicals contain the fluorine atom. Application of fluoro-organic compounds can be attributed to the unique metabolic stability, lipophilicity, and the binding affinity offered by them. Over the last five years, the share of fluorine containing drugs approved by FDA is 25%, while fluorine containing pesticides form 67% of the total pesticides launched. 22% of the drugs approved by the FDA in the last two decades contain at least one fluorine atom, on an average. Further, 53% of pesticides introduced during 1998-2020 contain the fluorine atom. Navin Fluorine International (NFIL), SRF, and Gujarat Fluorochemical (GFL) have developed competencies in the fluorine chemistry over decades. Specialisation in fluorination together with expertise in synthesis at all scales will allow NFIL and SRF to take advantage of opportunities emanating from pharma and agrochemical industry. We are upgrading NFIL to BUY and maintaining ADD on SRF.



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Fluorinated organic compounds are of particular interest in the field of pharmaceuticals and agrochemicals. Fluoro-pharmaceuticals and fluoro-agrochemicals find their application in drugs and pesticides. Nearly 20% of pharmaceutical compounds and 34% of agrochemicals contain the fluorine atom. Application of fluoro-organic compounds can be attributed to the unique metabolic stability, lipophilicity, and the binding affinity offered by them. Over the last five years, the share of fluorine containing drugs approved by FDA is 25%, while fluorine containing pesticides form 67% of the total pesticides launched. 22% of the drugs approved by the FDA in the last two decades contain at least one fluorine atom, on an average. Further, 53% of pesticides introduced during 1998-2020 contain the fluorine atom. The market size of the therapies in which fluorine is used is expected to grow at a 5% CAGR, from USD 423bn in CY20 to USD 535bn in CY25. The global synthetic pesticides market is expected to grow at a 5% CAGR, from USD 55bn in CY19 to USD 70bn in CY24.

Navin Fluorine International (NFIL), SRF, and Gujarat Fluorochemical (GFL) have developed competencies in the fluorine chemistry over decades. Long-term contracts signed by NFIL and SRF to supply intermediates to pharma/agrochemical are a testimony to their capabilities. The rising share of fluorine in drugs and pesticides is opening up huge opportunities and in order to tap these, capital allocation is skewed towards setting up speciality fluorochemical capacities.

NFIL has laboratory and production facilities that can produce milligrams to tonnes of a compound. Manchester Organics (MOL) and R&D facilities in India act as a backbone for the company, while the plants at Dewas and Surat offer manufacturing scale. NFIL's INR ~8.3bn investment in high-value businesses over FY22-24E will cause their share in revenue to rise to 76% by FY24E, from 65% in FY21. ~60% share of pharma in the company's high-value businesses will make its earnings growth more resilient.

SRF has widened its capabilities to supply advanced intermediates to agrochemical and pharmaceutical industries. Its speciality chemical business witnessed 38% revenue CAGR over the last decade. We believe prudent investments in capacities and focus on innovation and R&D will help sustain the growth momentum for the chemical business. Investments in capacity building in other businesses will boost growth further.

Specialisation in fluorination together with expertise in synthesis at all scales will allow NFIL and SRF to take advantage of opportunities emanating from pharma and agrochemical industry. We expect EPS growth at 52% and 15% CAGR over FY22-24E for NFIL and SRF. RoE will expand from 16% in FY22E to 27% in FY24E for NFIL and contract for SRF from 24% in FY22E to 22% in FY24E. Currently, NFIL and SRF are trading at 30.9x FY24E and 27.8x FY24E respectively. We are upgrading NFIL to BUY and maintaining ADD on SRF.

Company	Reco	TP	Upside (%)
NFIL	BUY	4,905	27
SRF	ADD	2,675	13

FY24E	PER (x)	P/B (x)
NFIL	30.9	7.5
SRF	27.8	5.5

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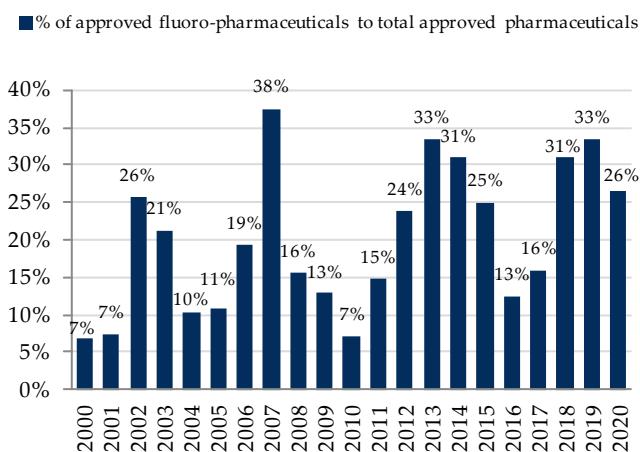
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## Fluorination: Sector Thematic

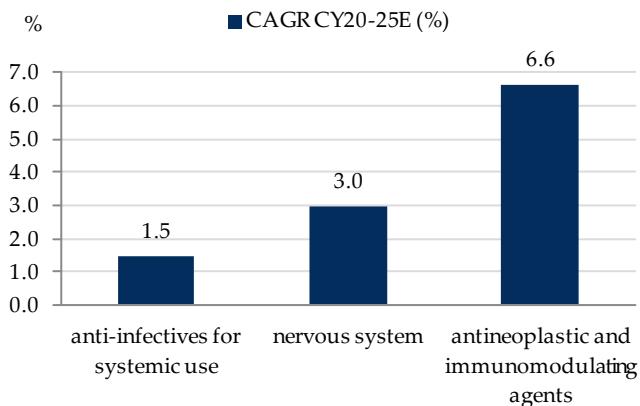
### Story in charts

#### Exhibit 1: Increasing share of fluoro-pharmaceutical approvals in the past decade



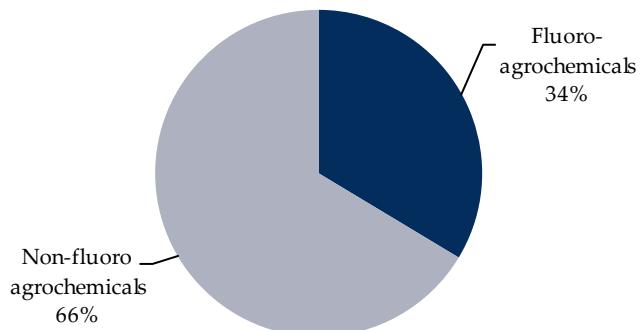
Source: HSIE Research

#### Exhibit 3: Growth opportunities in the top three therapies for fluoro-pharmaceuticals



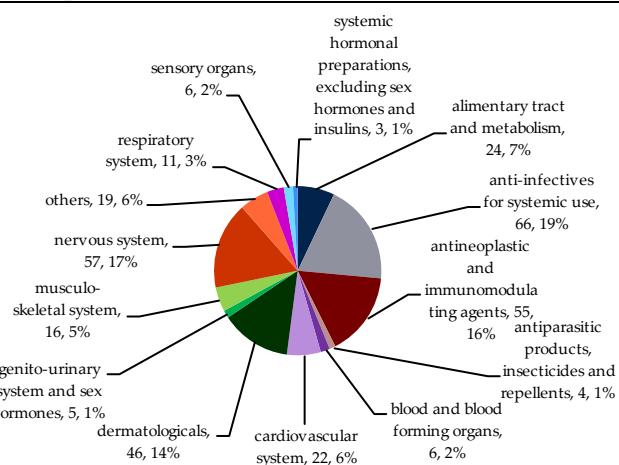
Source: Glenmark Life Sciences Limited, HSIE Research

#### Exhibit 5: Fluoro-agrochemicals form over 1/3rd of the total registered agrochemicals



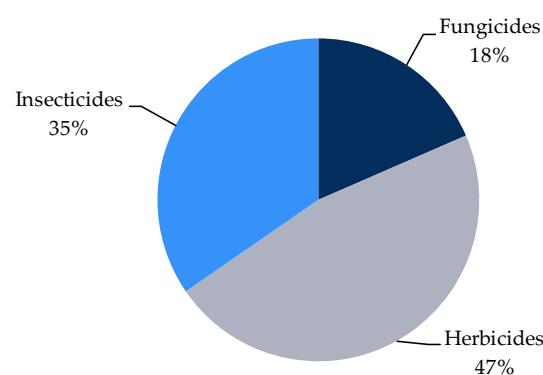
Source: HSIE Research

#### Exhibit 2: Therapeutic uses of the total approved fluoro-pharmaceuticals



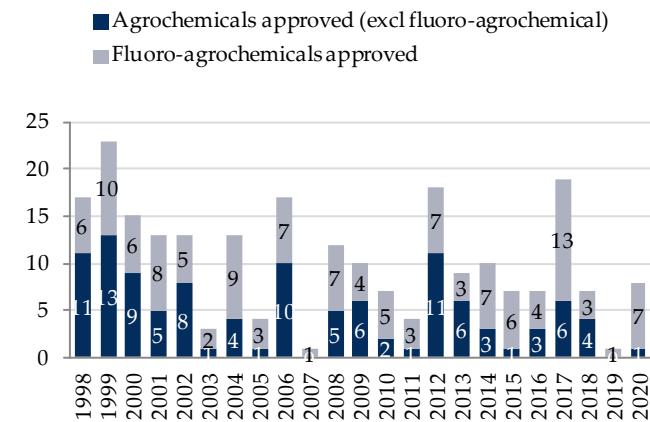
Source: HSIE Research

#### Exhibit 4: Fluoro-agrochemicals find more usage in herbicides



Source: HSIE Research

#### Exhibit 6: Increasing share of fluoro-agrochemicals in agrochemical approvals



Source: HSIE Research

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## Fluorine atom continues to shine

### Why is fluorine a preferred atom?

Fluorine is both small and the highest electronegative element. This makes it a unique atom that has a profound effect when bound to carbon in organic molecules. The incorporation of fluorine into organic molecules radically modifies the reactivity, chemical and biological properties, and physiological activity of the molecule. High electro negativity of fluorine results in alternation of electron distribution, which impacts the stability of the adjacent functional groups. Fluorine has a huge impact on the acidity or basicity of functional groups. Attachment of fluorine on amines makes them less basic, while introduction of fluorine in carboxylic acid increases its acidity. It may also change the molecular structure (or conformation) and increases the stability of hydrocarbons.

Fluorine compounds have shown to affect the metabolic stability, lipophilicity, and the binding affinity of many drugs. These unique properties that these fluorine compounds can achieve in pharmaceuticals, agrochemicals, and materials have led to an increased importance of fluorine chemistry in these industries.

## Fluorine is a hot atom in the pharma industry

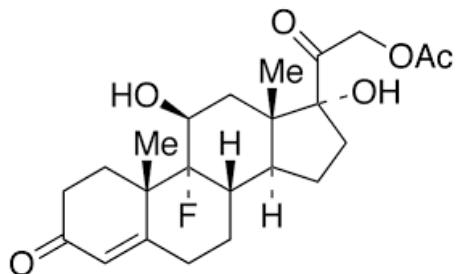
### Why is fluorine gaining importance in pharmaceuticals, agrochemicals?

The prevalence of fluoro-organic compounds among pharmaceuticals and agrochemicals is owing to the following: (1) fluorine (van der Waals radius 1.470Å) is the second-smallest atom after hydrogen (van der Waals radius 1.200Å); thus, the replacement of a hydrogen atom in a drug or pesticides candidate with fluorine does not drastically change the parent structure; (2) the carbon-fluorine bond is the strongest bond that carbon can form (C-F bond 116kcal/mol versus C-H bond 99kcal/mol), which often increases the metabolic stability of the drugs or pesticides; (3) fluorine is the most electronegative element (electronegativity of 3.98). Thus, it induces bond polarisation that alters the lipophilicity (the ability of a chemical compound to dissolve in fats, lipids, etc., of a compound). Lipophilicity of the molecule facilitates transmembrane transfer and bioavailability of the molecule. Due to these properties, it can be truly stated that fluorocarbons have a heart of diamond and skin of rhinoceros to hide.

These characteristics of the fluorine atom have an effect on the absorption, distribution, metabolism, and excretion of a drug or pesticides. Therefore, fluoro-pharmaceuticals and organo-fluorine pesticides are highly preferred in the pharmaceuticals and agrochemical industries.

### Growth of fluoro-pharmaceuticals

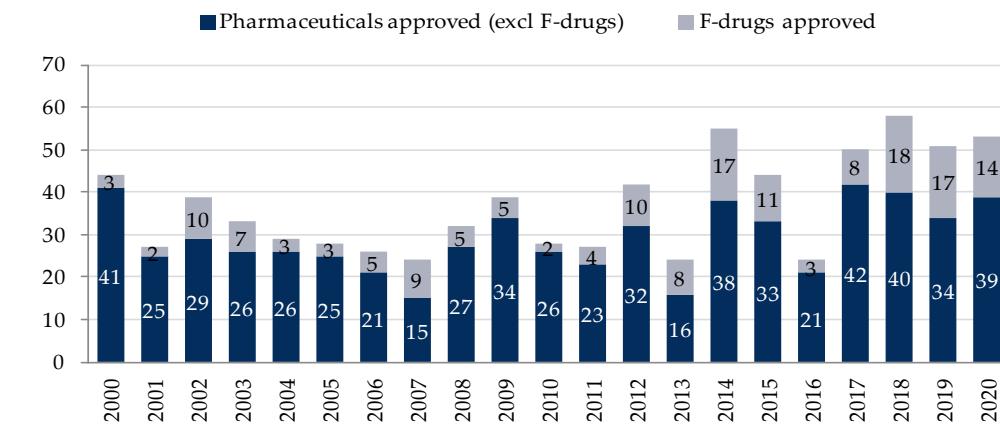
Fluoro-pharmaceuticals are small organic pharmaceutical drugs that contain at least one fluorine atom or a fluorinated functional group. 20% of the total marketed drugs currently are fluoro-pharmaceuticals. Fludrocortisone (refer Exhibit 7) was the first fluoro-pharmaceutical molecule that was introduced in 1954. It was sold under the brand name Florinef for treating adrenogenital syndrome, adrenal insufficiency, and postural hypotension. Fluoroquinolones were introduced in 1980s; they are considered as second generation fluoro-pharmaceutical drugs. Fluoroquinolone includes ciprofloxacin, norfloxacin, and levofloxacin. Fluoroquinolones are a class of antibiotics that treat or prevent bacterial infections.

**Exhibit 7: Molecular structure of fludrocortisone acetate**


Source: HSIE Research

After the introduction of fluoroquinolones, the number of approved fluoro-pharmaceuticals has steadily increased over the last two decades. Globally, more than 340 fluoro-pharmaceuticals have been registered including Lipitor, which was used to prevent cardiovascular disease in people at high risk.

In 2018, 58 pharmaceutical molecules were approved by the US Food and Drug Administration (FDA), of which 18 (~31%) were fluoro-pharmaceuticals. Furthermore, in 2019 and 2020, 17 (~33%) and 14 (~26%) new fluoro-pharmaceuticals (small molecules) were approved by the FDA.

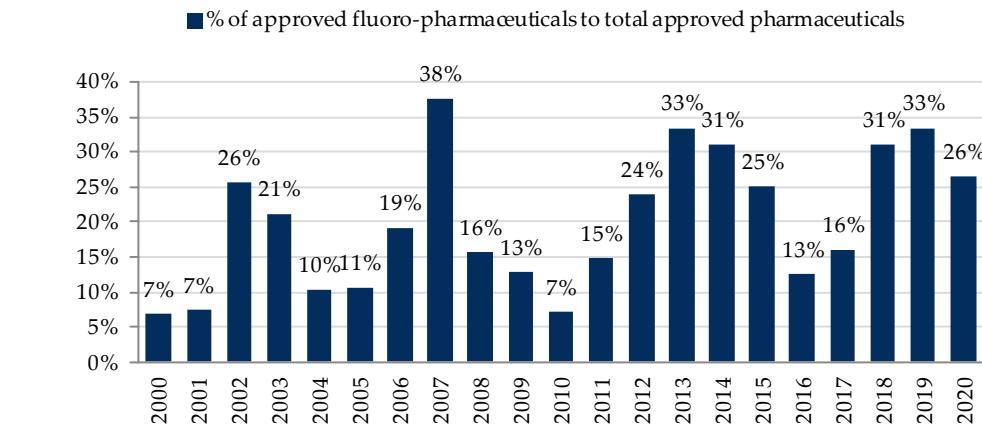
**Exhibit 8: Pharmaceuticals approved over the past two decades**


Source: HSIE Research

As can be seen from exhibit 8 an increased number of fluoro-pharmaceuticals have consistently been registered each year, and the proportion of fluoro-pharmaceuticals to the total pharmaceuticals approved has increased in the past decade. In the years spanning from 2011 to 2020, 110 fluoro-pharmaceuticals were approved by the FDA, out of the total 428 drugs approved during that time. The share of fluoro-pharmaceuticals was 11% and 17% during 1991-2000 and 2001-2010 respectively. This share has improved to more than a quarter in the last decade. (Exhibit 9).

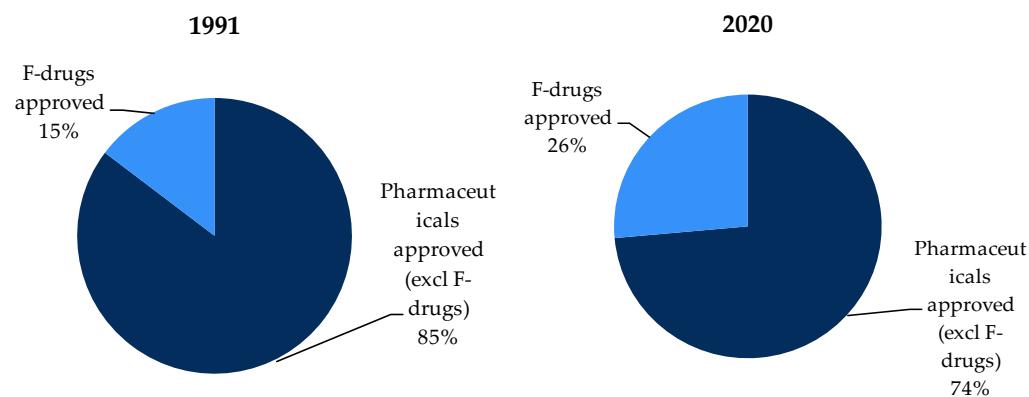
## Fluorination: Sector Thematic

### Exhibit 9: Increasing share of fluoro-pharmaceutical approvals in the past decade



Source: HSIE Research

### Exhibit 10: Fluoro-pharmaceuticals formed over 25% of the approved drugs in 2020



Source: HSIE Research

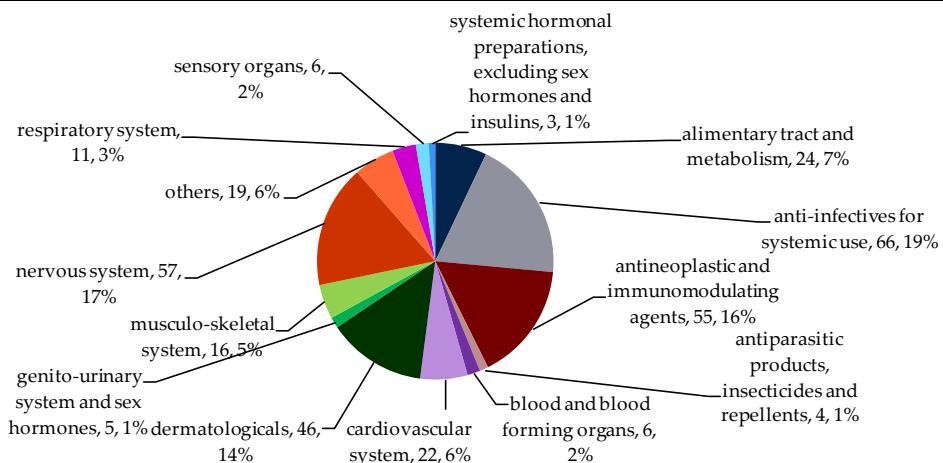
We have analysed 340 fluoro-pharmaceuticals that existed in the market in 2019 and categorised them into groups, based on their therapeutic purpose. In this categorisation, we have included fluorine molecules from the very first fluoro-pharmaceutical introduced in 1954, i.e. Florinef, to the latest fluoro-pharmaceuticals registered in 2019.

#### Classification of fluoro-pharmaceuticals based on their therapeutic purpose

Fluoro-pharmaceuticals have been used for a broad range of therapeutic purposes targeting alimentary tract and metabolism, anti-infectives for systemic use, antineoplastic and immunomodulating agents, cardiovascular system, dermatologicals, nervous system, etc. We were interested in classifying fluoro-pharmaceuticals, based on their medical purposes and uses.

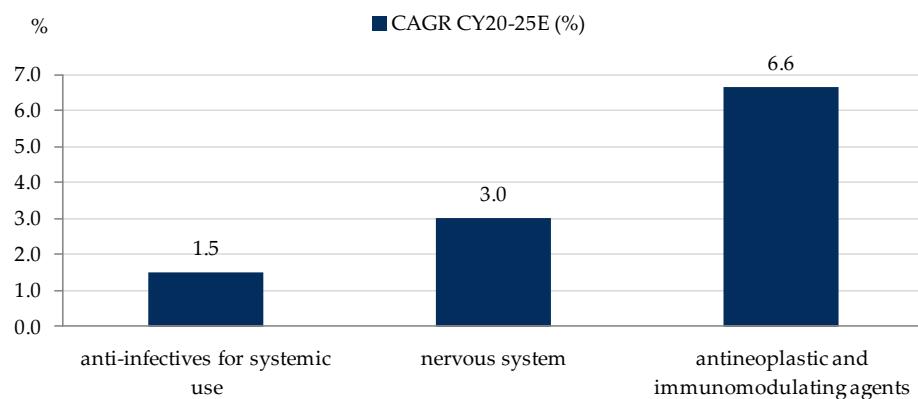
The top three medicinal uses of fluoro-pharmaceuticals are anti-infectives for systemic use (molecules approved: 66, 19%); nervous system (molecules approved: 57, 17%); and antineoplastic and immunomodulating agents (molecules approved: 55, 16%; refer exhibit 11). The market size of these three therapy drugs in 2020 was ~USD 423bn, which is expected to grow at 5% CAGR to ~USD 535bn by 2025.

## Exhibit 11: Therapeutic uses of the total approved fluoro-pharmaceuticals



Source: HSIE Research | The data in the above chart is based on the 340 approved fluoro-pharmaceuticals existing in the market in 2019

## Exhibit 12: Growth opportunities in the top three therapies



Source: Glenmark Life Sciences Limited, HSIE Research

## Organofluorines in the agrochemicals industry

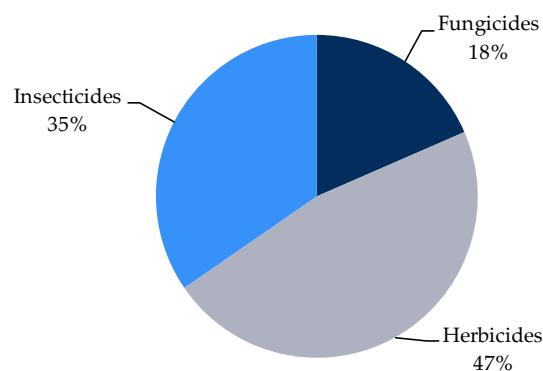
Currently, more than 1,200 agrochemicals are listed, many of which are being used by farmers to generate food supply. Crop production has suffered from problems associated with plant diseases, pests, parasites, fungi, viruses, and drastic climate conditions. Agrochemicals (pesticides) such as herbicides, fungicides, and insecticides have played an essential role in maintaining crop yields and minimising crop loss. However, resistance to pesticides is a frequently occurring phenomenon, and thus a constant supply of new agrochemicals with enhanced performance and lower toxicity are needed. Thus, new agrochemical development has emerged as a key area of research.

Traditionally, agrochemicals were derived from natural products and inorganic materials. The use of synthetic organic agrochemicals in crop protection, rather than inorganic chemicals and natural products, has gone up over time. However, more sophisticated and more effective agrochemicals are constantly required for crop protection. These new-age agrochemicals are less toxic and environment friendly.

Fluorine containing agrochemicals have played an important role in crop protection over the last eight decades. Fluorinated analog of Dichloro diphenyl trichloroethane (DDT) 1,1,1-trichloro-2,2-bis(4-fluorophenyl) ethane (DFDT) is considered as the first organo-fluorine agrochemical. It was launched in 1945 as an insecticide. After the success of fluoro-DDT, the first fluoro-herbicide, trifluralin, was introduced in 1963. Over time, organo-fluorine compounds have emerged as attractive synthetic building blocks in the agrochemical industry as well. Amongst the total 1,261 pesticides, there are 424 fluorine-containing pesticides, i.e., 34% of the launched pesticides are fluorine-containing materials. We have analysed ~424 fluoro-agrochemicals and subdivided them into categories, based on whether they are used in insecticides, pesticides, or herbicides. Fluoro-agrochemicals were found to be distributed relatively polarised towards herbicides (Refer exhibit 13).

In the last two decades, fluoro-chemicals have been associated with significant advances in the agrochemical development process.

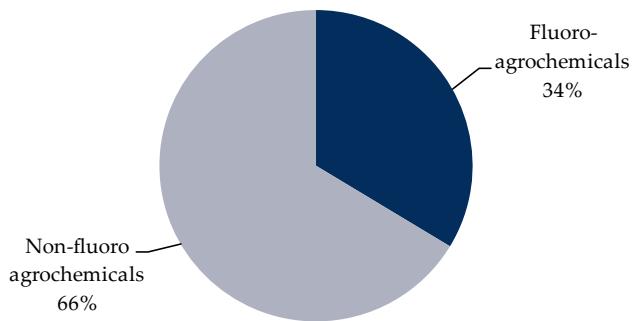
### Exhibit 13: Fluoro-agrochemicals find more usage in herbicides



Source: HSIE Research

## Fluorination: Sector Thematic

**Exhibit 14: Fluoro-agrochemicals form over 1/3<sup>rd</sup> of the total registered agrochemicals**

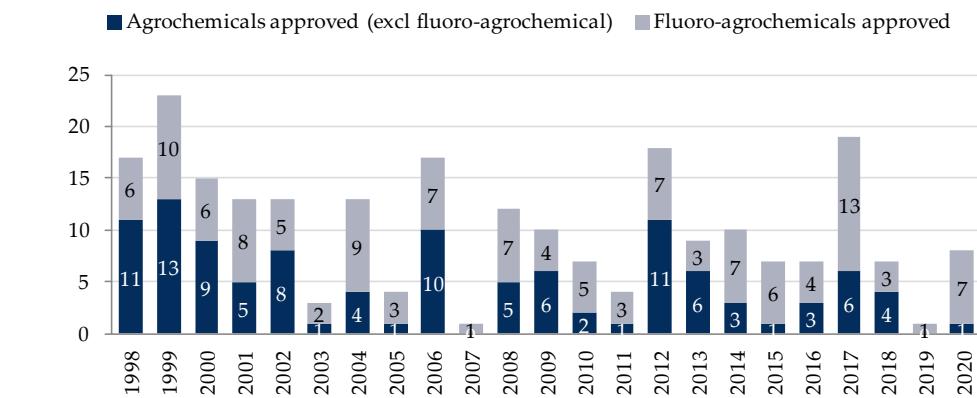


Source: HSIE Research

Over the last two decades, 127 fluoro-agrochemicals were registered, out of 238 agrochemical (or 53% of) molecules registered. The share of fluorine containing agrochemicals has improved to 69% over the last seven years. This indicates that the efficiency and effectiveness of fluorine-based pesticides is becoming more recognised and demanded.

Global synthetic pesticides market is expected to grow at a 5% CAGR, from USD 55bn in CY19 to USD 70bn in CY24. Herbicide, fungicide, insecticide, and pesticides market will grow at 4.1%, 6.2% and 6.3% CAGRs over CY19-24.

**Exhibit 15: Increasing share of fluoro-agrochemicals in agrochemical approvals**



Source: HSIE Research

### Bromine chemistry versus fluorine chemistry

Fluorinated organic compounds are of particular interest in the field of pharmaceuticals and agrochemicals. Of the total approved molecules, nearly 20% of pharmaceutical compounds and 34% of agrochemicals contain fluorine atoms. Application of fluoro-organic compounds can be attributed to the unique metabolic stability, lipophilicity, and binding affinity offered by them. However, brominated hydrocarbon has limited application in pharmaceutical and agrochemical industries. Bromide ions have the ability to decrease the sensitivity of the central nervous system. The use of bromine in APIs is very low as compared to the use of fluorine in API formulations.

Brominated compounds are largely used in the process of manufacturing pharmaceutical products. They act as catalysts and reduce the reaction conditions. Advanced intermediates are used as catalysts, which facilitate the reaction at a lower temperature or pressure reaction conditions. Therefore, although bromine is absent in the final API of pharma and agrochemical molecules, bromine molecules have wide application in the production of an API. Thus, fluorine and bromine chemistries do not compete for the market share of APIs since they complement each other.

## Companies

### Navin Fluorine International Ltd (NFIL) (TP: INR 4,905; BUY)

- **Capacity expansion and long-term contracts to fuel growth:** NFIL has entered into a seven-year, USD 410mn (~INR 28bn), contract with Honeywell International Inc. to manufacture Honeywell's proprietary Solstice range of hydrofluoroolefins (HFO) in India, for which NFIL will be investing USD 61.5mn (~INR 4.4bn). The product is a high performance product (HPP); it is not a part of the company's existing product portfolio and is a new set of opportunities for application of fluorine for a completely new and environment friendly vertical. The expected commencement of supplies is in Q1FY23.

The company has also invested INR 1.95bn in a multipurpose plant (MPP) at Dahej. This MPP will manufacture agrochemical intermediates. It can achieve INR ~2.7bn peak revenue by producing speciality fluorochemicals. This capacity will come on stream in H1FY23 and is expected to ramp up in three years.

NFIL has also signed an INR 8bn, five-year agreement for supply of key **agro-chemical** fluoro-intermediate by investing INR 1.25bn. This Capex is expected to be completed by the end of FY23, and full ramp-up is expected in two years.

The company is also planning to debottleneck cGMP-3 plant with an investment of INR 0.7bn. This exercise will be completed by Q3FY23. Post de-bottlenecking of cGMP-3, the company is expecting revenue of ~ USD 65-70mn per annum from its CRAMS business unit. It will start working on cGMP-4 after completion of this project.

Over FY22-24E, the company will invest ~INR 8.3bn in HPP, speciality and CRAMS business units. The HPP, MPP and agro-chemical projects are all done through Navin Fluorine Advanced Sciences Limited, a wholly owned subsidiary of the company, which will lay the foundation for the next phase of growth of the company's business.

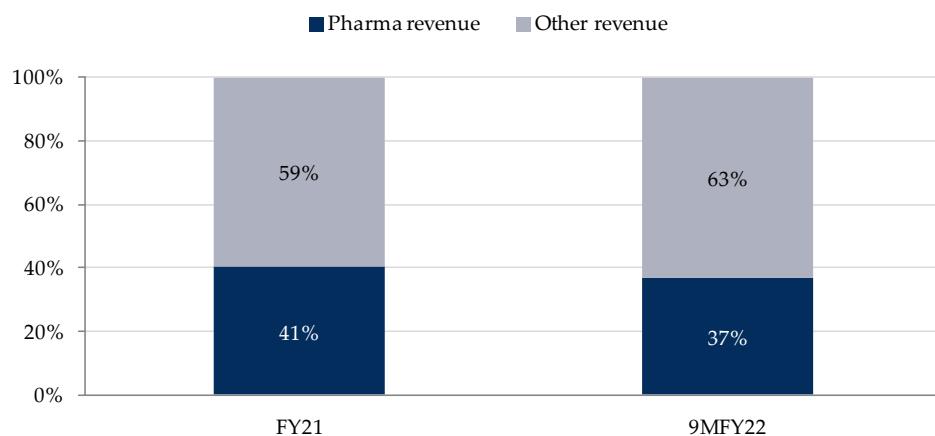
- **Strong R&D capability of MOL:** NFIL has a wholly-owned subsidiary based out of UK, Manchester Organics (MOL), which is a world leader in fluorination and high pressure chemistry, research, and manufacturing. This subsidiary is the backbone of NFIL's CRAMS business. MOL has a milligram to multi-kilo research/production facility in the UK with high pressure/specialist fluorination facility; and multi-tonne production facility, pilot plant and cGMP facility spread over two sites in India (in Surat and Dewas), with high pressure capability. It has R&D operations with laboratory facilities spread over 27,000 sq ft, including walk-in fume hoods. MOL has a catalogue of over 50,000 compounds catering to global clients. The constant focus on R&D will enable the company to remain competitive and expand its customer base.
- **High-value business will continue leading the way:** The company is a pure-play fluorochemicals company and its business is divided into four business units (BU) viz. (1) speciality chemicals, 40% of 9MFY22 revenue mix; (2) contract research and manufacturing services (CRAMS), 21% of the mix; (3) refrigerants, 19%; and (4) inorganic fluorides, 20%. We expect the contribution from the high-value business units i.e. Speciality chemicals, HPP and CRAMS to increase to 76% by FY24E from 65% in FY21. Share of pharma is ~60% in the company's high-value business. This makes earning growth more resilient for NFIL. The company has admitted that competitive intensity in fluorine chemistry has increased. However, it clarifies that the competition is higher in the agrochemical industry, as it comes at the bottom of the pyramid, but it would be

## Fluorination: Sector Thematic

limited in the pharma side. The company with its vast experience and long-term relationship with customers has an edge over new entrants.

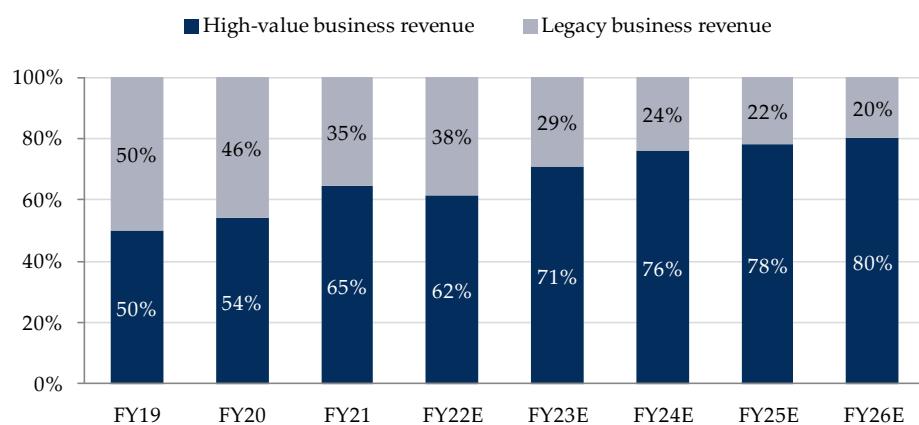
- **Pharma and agrochemical industries lead EBITDA margins:** Over FY17-21, EBITDA margins have remained over the 21% mark, led by robust demand from pharma and agrochemical customers for speciality chemicals as well as higher traction in the CRAMS BU. The margin further expanded to 25% for 9MFY22 despite facing the ongoing supply chain issues and high and volatile raw material prices in FY22. We expect the EBITDA margin to rise to 28/32% in FY23/24E. The high-value business units to be the growth drivers, going forward. EBITDA should grow by 55/49% to INR 5.6/8.4bn in FY23/24E, led by unabated demand from pharma/agrochemical customers.
- **Financial performance and outlook:** The stock is currently trading at 30.9x FY24E EPS. We are positive on NFIL, owing to its (1) earnings visibility given long term contracts and (2) tilt in sales mix towards customised products, which will ensure better margins.

**Exhibit 16: Share of revenue of pharma end-user industry in the total revenue**



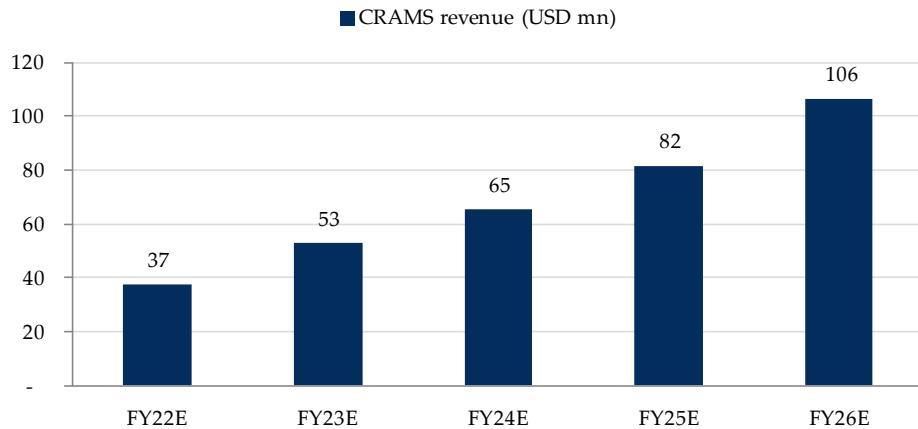
Source: Company, HSIE Research | Note: The revenue figures are of the standalone business. We have assumed 40% of the revenue from speciality chemicals business and 100% of the revenue from CRAMS business to accrue from the pharma industry

**Exhibit 17: Increasing contribution from the high-value business to the revenue**



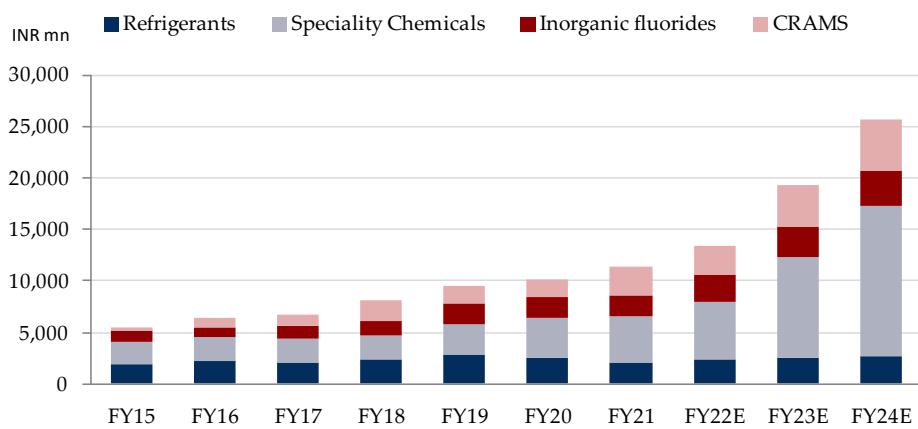
Source: Company, HSIE Research | Note: The revenue figures considered are of the standalone business

## Exhibit 18: Momentum in the CRAMS business to sustain



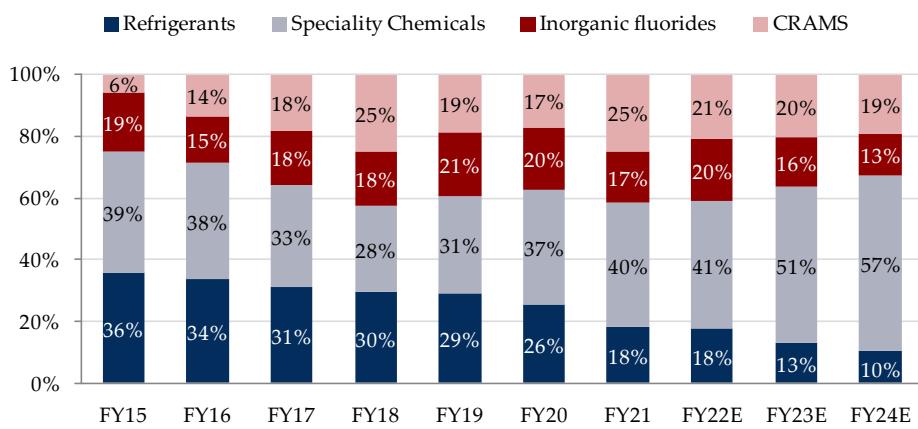
Source: Company, HSIE Research

## Exhibit 19: Revenue to grow at 38% CAGR over FY22-24E



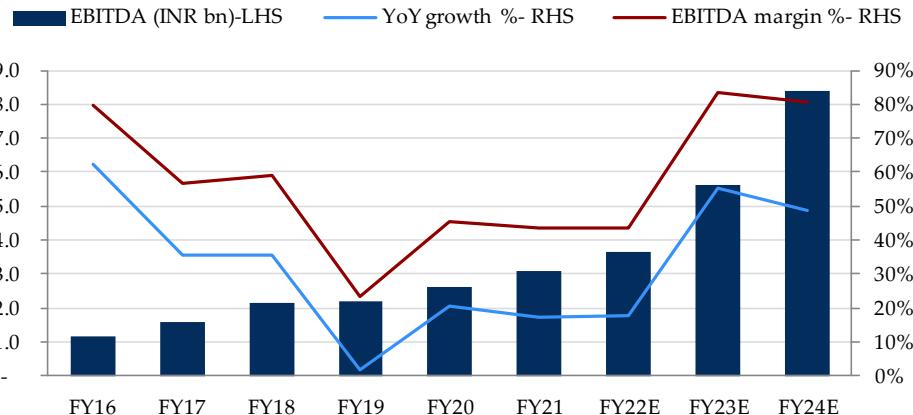
Source: Company, HSIE Research | Note: The revenue figures are of the standalone business

## Exhibit 20: Segmental revenue split (%)



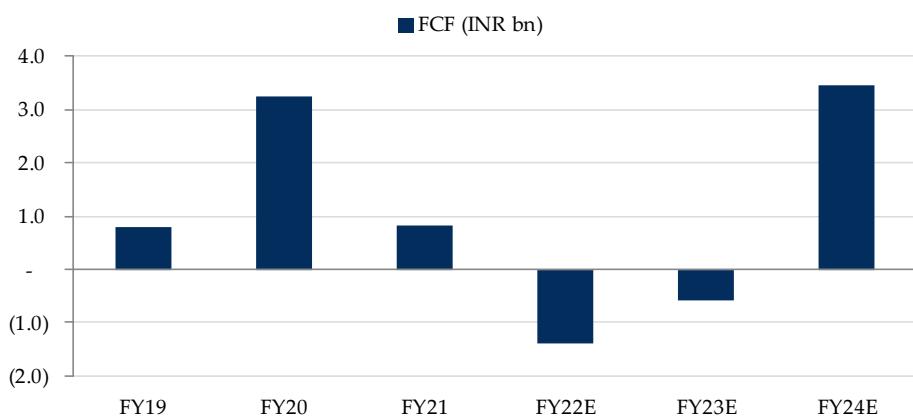
Source: Company, HSIE Research | Note: The revenue figures considered are of the standalone business

## Exhibit 21: EBITDA to grow at 52% CAGR over FY22-24E



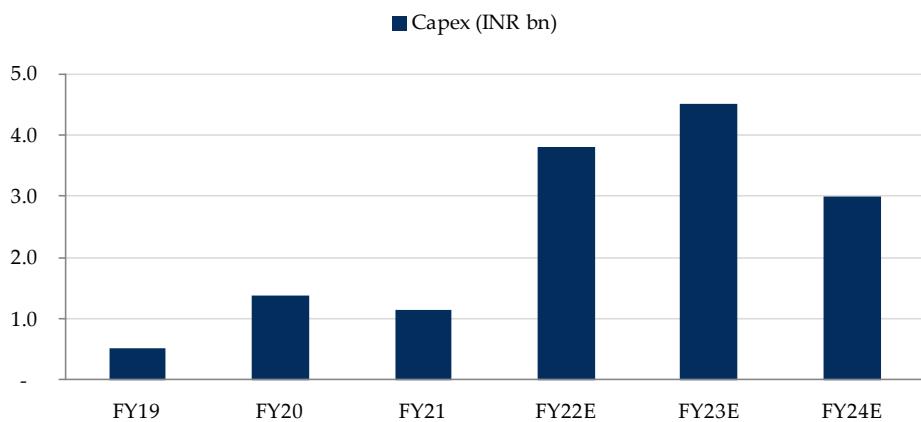
Source: Company, HSIE Research

## Exhibit 22: NFIL to generate an FCF of INR 1.5bn over FY22-24E



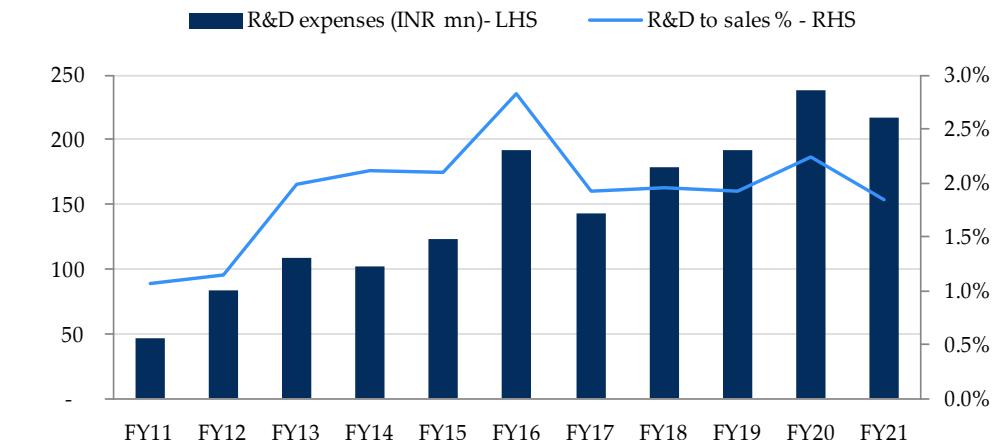
Source: Company, HSIE Research

## Exhibit 23: NFIL's Capex to mainly focus on its high-value business going forward



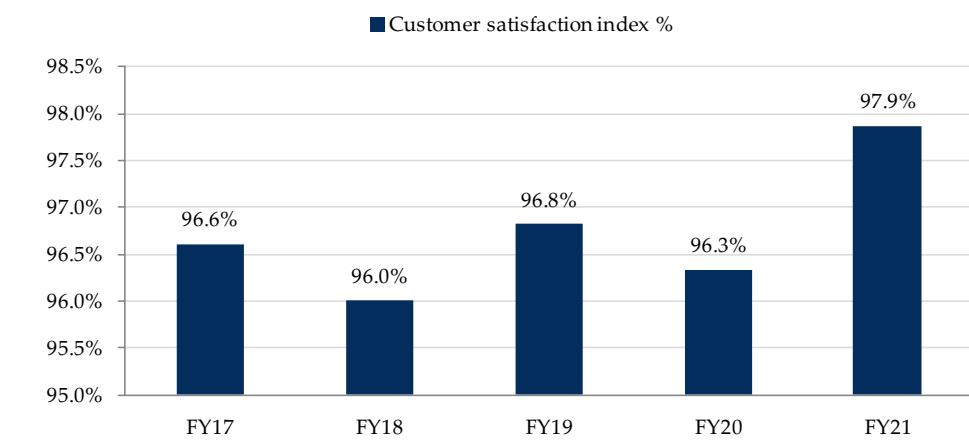
Source: Company, HSIE Research

## Exhibit 24: Constant focus on R&D to act as a growth lever



Source: Company, HSIE Research

## Exhibit 25: NFIL has a history of high customer satisfaction index



Source: Company, HSIE Research

# Fluorination: Sector Thematic

## Financials (Consolidated)

### INCOME STATEMENT

INR mn	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
<b>Revenues</b>	7,415	9,127	9,959	10,616	11,794	14,053	19,938	26,387
<i>Growth (%)</i>	9.1	23.1	9.1	6.6	11.1	19.2	41.9	32.3
Material Expenses	3,272	4,023	4,766	4,838	5,374	6,179	8,476	10,910
Employee Expenses	918	1,105	1,155	1,308	1,417	1,727	2,221	2,610
Other Operating Expenses	1,637	1,849	1,855	1,835	1,910	2,514	3,607	4,491
<b>EBIDTA</b>	<b>1,588</b>	<b>2,150</b>	<b>2,184</b>	<b>2,635</b>	<b>3,093</b>	<b>3,633</b>	<b>5,633</b>	<b>8,377</b>
<i>EBIDTA Margin (%)</i>	21.4	23.6	21.9	24.8	26.2	25.9	28.3	31.7
<i>Growth (%)</i>	35.3	35.4	1.6	20.7	17.4	17.5	55.1	48.7
Depreciation	299	398	275	370	442	476	739	1,113
<b>EBIT</b>	<b>1,289</b>	<b>1,752</b>	<b>1,908</b>	<b>2,265</b>	<b>2,651</b>	<b>3,157</b>	<b>4,895</b>	<b>7,264</b>
Other Income (incl EO items)	558	925	344	333	946	474	484	493
Interest	27	12	8	20	18	14	14	14
<b>PBT</b>	<b>1,820</b>	<b>2,665</b>	<b>2,244</b>	<b>2,578</b>	<b>3,578</b>	<b>3,617</b>	<b>5,364</b>	<b>7,743</b>
Tax	451	840	770	(1,436)	1,108	928	1,155	1,563
<b>PAT before share of JV</b>	<b>1,370</b>	<b>1,825</b>	<b>1,474</b>	<b>4,014</b>	<b>2,471</b>	<b>2,690</b>	<b>4,209</b>	<b>6,180</b>
EO items (net of tax)	-	367	119	230	359	-	-	-
Share of Profits from JV/Associates	(4)	(27)	17	72	105	-	-	-
<b>APAT</b>	<b>1,366</b>	<b>1,431</b>	<b>1,372</b>	<b>3,855</b>	<b>2,216</b>	<b>2,690</b>	<b>4,209</b>	<b>6,180</b>
<i>Growth (%)</i>	63.6	4.7	(4.1)	181.0	(42.5)	21.4	56.5	46.8
<b>AEPS</b>	<b>27.7</b>	<b>36.4</b>	<b>27.7</b>	<b>77.9</b>	<b>44.8</b>	<b>54.3</b>	<b>85.0</b>	<b>124.9</b>
<i>Growth (%)</i>	63.6	31.6	(23.8)	181.0	(42.5)	21.4	56.5	46.8

Source: Company, HSIE Research

### BALANCE SHEET

INR mn	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
<b>SOURCES OF FUNDS</b>								
Share Capital	98	99	99	99	99	99	99	99
Reserves	8,254	9,736	10,626	14,023	16,240	18,123	21,069	25,395
<b>Total Shareholders' Funds</b>	<b>8,352</b>	<b>9,835</b>	<b>10,724</b>	<b>14,122</b>	<b>16,339</b>	<b>18,222</b>	<b>21,168</b>	<b>25,494</b>
Long-term Debt	111	42	-	-	-	-	-	-
Short-term Debt	74	84	41	14	25	25	25	25
<b>Total Debt</b>	<b>185</b>	<b>127</b>	<b>41</b>	<b>14</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>
Deferred Taxes	271	308	348	(151)	207	157	107	57
Other LT Liabilities	243	257	231	391	409	409	409	409
Minority Interest	-	-	-	-	-	-	-	-
<b>TOTAL SOURCES OF FUNDS</b>	<b>9,051</b>	<b>10,526</b>	<b>11,345</b>	<b>14,376</b>	<b>16,980</b>	<b>18,813</b>	<b>21,709</b>	<b>25,985</b>
<b>APPLICATION OF FUNDS</b>								
Net Block	4,153	2,826	2,863	3,860	3,985	6,358	10,894	13,156
<b>CWIP</b>	<b>168</b>	<b>201</b>	<b>393</b>	<b>389</b>	<b>949</b>	<b>1,900</b>	<b>1,125</b>	<b>750</b>
Good will	878	878	878	878	878	878	878	878
<b>LT Investments</b>	<b>1,834</b>	<b>2,928</b>	<b>3,258</b>	<b>3,097</b>	<b>1,136</b>	<b>1,240</b>	<b>1,359</b>	<b>1,497</b>
LT Loans & Advances	68	73	73	75	81	81	81	81
Inventories	1,127	1,138	1,119	1,579	1,804	2,149	2,744	3,268
Debtors	1,376	1,556	1,727	2,185	2,841	3,325	4,224	5,060
Cash & Equivalents	1,804	2,450	2,253	3,513	6,284	3,904	1,882	3,278
Other Current Assets	366	506	508	559	1,019	1,099	1,179	1,259
<b>Total Current Assets</b>	<b>4,673</b>	<b>5,651</b>	<b>5,607</b>	<b>7,836</b>	<b>11,947</b>	<b>10,476</b>	<b>10,028</b>	<b>12,866</b>
Creditors	778	984	713	981	1,074	1,280	1,816	2,403
Other Current Liabilities	1,945	1,046	1,014	777	920	839	839	839
<b>Total Current Liabilities</b>	<b>2,723</b>	<b>2,030</b>	<b>1,727</b>	<b>1,758</b>	<b>1,995</b>	<b>2,119</b>	<b>2,655</b>	<b>3,243</b>
<b>Net Current Assets</b>	<b>1,951</b>	<b>3,621</b>	<b>3,880</b>	<b>6,078</b>	<b>9,953</b>	<b>8,357</b>	<b>7,373</b>	<b>9,623</b>
<b>TOTAL APPLICATION OF FUNDS</b>	<b>9,051</b>	<b>10,526</b>	<b>11,345</b>	<b>14,376</b>	<b>16,980</b>	<b>18,813</b>	<b>21,709</b>	<b>25,985</b>

Source: Company, HSIE Research

## Fluorination: Sector Thematic

### CASH FLOW STATEMENT

INR mn	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
Reported PBT	1,817	2,638	2,261	2,650	3,683	3,617	5,364	7,743
Non-operating & EO items	(25)	(35)	216	144	(186)	(0)	0	0
Adjusted PBT	1,841	2,673	2,045	2,506	3,869	3,617	5,364	7,743
Interest expenses	27	12	8	20	18	14	14	14
Depreciation	299	398	275	370	442	476	739	1,113
Working Capital Change	235	(1,720)	(264)	268	(1,279)	(784)	(1,038)	(854)
Tax Paid	(451)	(840)	(770)	1,436	(1,108)	(928)	(1,155)	(1,563)
<b>OPERATING CASH FLOW (a)</b>	<b>1,952</b>	<b>523</b>	<b>1,295</b>	<b>4,600</b>	<b>1,943</b>	<b>2,395</b>	<b>3,924</b>	<b>6,453</b>
Capex	(1,750)	897	(504)	(1,362)	(1,127)	(3,800)	(4,500)	(3,000)
Free cash flow (FCF)	202	1,419	790	3,237	816	(1,405)	(576)	3,453
Investments	661	(1,193)	(172)	1,124	1,144	(68)	(74)	(82)
Others	(33)	150	(120)	(1,446)	1,190	(86)	(95)	(106)
<b>INVESTING CASH FLOW (b)</b>	<b>(1,122)</b>	<b>(146)</b>	<b>(796)</b>	<b>(1,685)</b>	<b>1,208</b>	<b>(3,954)</b>	<b>(4,669)</b>	<b>(3,188)</b>
Debt Issuance/(Repaid)	(332)	(59)	(85)	(27)	11	-	-	-
Interest Expenses	(27)	(12)	(8)	(20)	(18)	(14)	(14)	(14)
FCFE	(157)	1,349	697	3,190	809	(1,419)	(591)	3,439
Dividend	(343)	(350)	(386)	(544)	(544)	(807)	(1,263)	(1,854)
Others	2	(0)	(24)	144	2	-	-	-
<b>FINANCING CASH FLOW (c)</b>	<b>(700)</b>	<b>(420)</b>	<b>(503)</b>	<b>(447)</b>	<b>(550)</b>	<b>(821)</b>	<b>(1,277)</b>	<b>(1,868)</b>
<b>NET CASH FLOW (a+b+c)</b>	<b>131</b>	<b>(44)</b>	<b>(5)</b>	<b>2,468</b>	<b>2,601</b>	<b>(2,380)</b>	<b>(2,023)</b>	<b>1,397</b>
EO Items, Others	-	-	-	-	-	-	-	-
<b>Closing Cash &amp; Equivalents</b>	<b>418</b>	<b>374</b>	<b>370</b>	<b>2,837</b>	<b>5,439</b>	<b>3,059</b>	<b>1,036</b>	<b>2,433</b>

Source: Company, HSIE Research

### KEY RATIOS

	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
<b>PROFITABILITY %</b>								
Gross Margin	55.9	55.9	52.1	54.4	54.4	56.0	57.5	58.7
EBITDA Margin	21.4	23.6	21.9	24.8	26.2	25.9	28.3	31.7
EBIT Margin	17.4	19.2	19.2	21.3	22.5	22.5	24.5	27.5
APAT Margin	18.4	15.7	13.8	36.3	18.8	19.1	21.1	23.4
RoE	17.5	15.7	13.3	31.0	14.6	15.6	21.4	26.5
Core RoCE	17.2	20.4	20.0	44.5	18.6	22.0	25.5	29.8
RoCE	16.0	14.7	12.6	30.2	14.2	15.1	20.8	26.0
<b>EFFICIENCY</b>								
Tax rate %	24.8	31.5	34.3	(55.7)	31.0	25.6	21.5	20.2
Fixed Asset Turnover (x)	2.2	2.6	3.5	3.2	3.0	2.7	2.3	2.2
Inventory (days)	55	46	41	54	56	56	50	45
Debtor (days)	68	62	63	75	88	86	77	70
Other Current Assets (days)	18	20	19	19	32	29	22	17
Payables (days)	38	39	26	34	33	33	33	33
Other Current Liab & Provs (days)	89	28	24	27	26	22	15	12
Cash Conversion Cycle (days)	14	61	73	88	116	116	101	88
Net Debt/EBITDA (x)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net D/E	(0.2)	(0.2)	(0.2)	(0.2)	(0.4)	(0.2)	(0.1)	(0.1)
Interest Coverage	68.5	182.5	272.4	129.6	187.2	254.1	376.2	542.4
<b>PER SHARE DATA (Rs/sh)</b>								
EPS	27.7	36.4	27.7	77.9	44.8	54.3	85.0	124.9
CEPS	33.7	37.0	33.3	85.4	53.7	63.9	100.0	147.3
DPS	6.9	7.1	7.8	11.0	11.0	13.6	21.3	31.2
BV	169.2	199.2	216.8	285.4	330.1	368.1	427.7	515.1
<b>VALUATION</b>								
P/E (x)	139.6	106.1	139.3	49.6	86.3	71.1	45.4	30.9
P/Cash EPS (x)	114.5	104.3	116.0	45.2	71.9	60.4	38.6	26.2
P/BV (x)	22.8	19.4	17.8	13.5	11.7	10.5	9.0	7.5
EV/EBITDA (x)	119.1	87.6	86.5	71.2	59.8	51.6	33.6	22.4
EV/Revenue (x)	25.5	20.6	19.0	17.7	15.7	13.3	9.5	7.1
OCF/EV (%)	1.0	0.3	0.7	2.5	1.1	1.3	2.1	3.4
FCFF/EV (%)	0.1	0.8	0.4	1.7	0.4	(0.8)	(0.3)	1.8
FCFE/M CAP (%)	(0.1)	0.7	0.4	1.7	0.4	(0.7)	(0.3)	1.8
Dividend Yield (%)	0.2	0.2	0.2	0.3	0.3	0.4	0.6	0.8

Source: Company, HSIE Research

## SRF Limited (TP: INR 2,675; ADD)

- **Chemical business' momentum to continue to stay strong:** SRF's chemicals business has delivered a robust performance with 17% revenue CAGR over FY11-21. Revenue contribution from the segment grew steadily from 21% in FY11 to 43% in FY21. The segment comprises of three sub-segments namely, (i) fluorochemicals, refrigerant gases and allied products, (ii) industrial chemicals, and (iii) speciality chemicals. Revenue of fluorochemicals grew at a CAGR of 10% from INR 4.8bn in FY11 to INR 12.0bn in FY21. Revenue of speciality chemicals grew at a CAGR of 38% from INR 0.9bn in FY11 to INR 23.9bn in FY21, which led to a jump in its contribution to the segmental revenue from 13% in FY11 to 66% in FY21. The chemical business of SRF to grow at a 25% CAGR over FY22-24E.

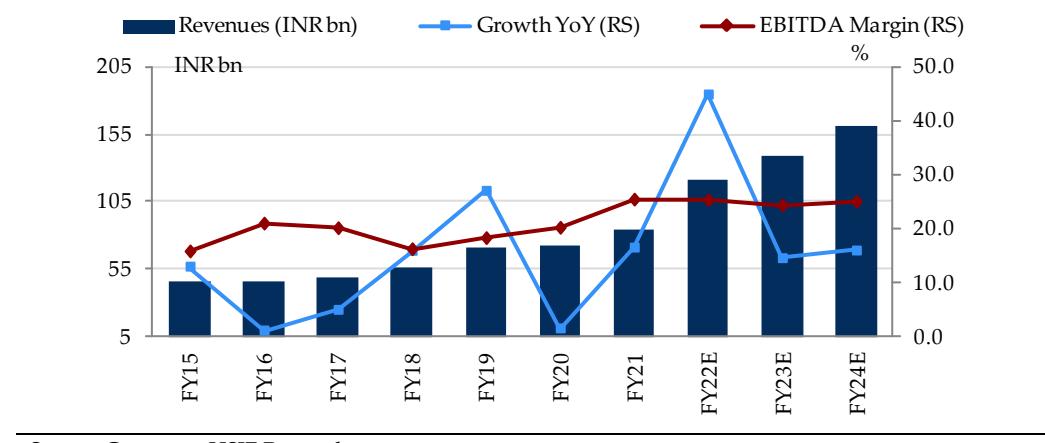
The growth in fluorochemicals and refrigerant gases businesses can be attributed to (i) augmentation of HFC capacity by 15ktpa to 65ktpa (the plant is expected to commence production by August-23) and (ii) de-bottlenecking of fluorochemical capacities. Speciality chemicals' growth will be driven by (i) launch of new fluorine molecules for agrochemical and pharmaceutical industries, (ii) ramp-up in capacity utilisation of the fourth MPP at Dahej, which will be commissioned by July-22, (iii) ramp-up in capacity utilisation of a dedicated plant for a pharma intermediate, which is expected to come on stream by November-22, (iv) 300MTPA of dedicated plant, which would produce a key agrochemical by June-22, and (v) commissioning of 5ktpa PTFE plant by September-22.

The share of EBIT of the chemical business in the total EBIT of SRF will increase from 40% in FY21 to 58% in FY24E. In the chemical business, the share of revenue of speciality chemicals will increase from 66% in FY21 to 68% in FY24E.

- **Investment in aluminium foil manufacturing:** The company has announced an INR 4.25bn of investment for setting up a 21,000MTPA aluminium foil manufacturing facility at Jaitapur, Indore. SRF expects an asset turnover of 1.75-2.0x from this investment. This project is expected to complete by September-23. Aluminium foil is widely used in food and non-food packaging. Indian market for the same is ~2 lakhs MTPA and is growing at ~8.5% per annum. There is an import substitution opportunity for SRF, as currently India imports 50% of its total requirements. We expect this investment to accelerate growth in the packaging film business. The company is also expanding its capacities in Hungary, Thailand and Indore. Thus, packaging films business will grow at 12% CAGR over FY22-24E.
- **Recovery in the technical textiles business (TTB):** SRF is the largest manufacturer of nylon tyre cord fabrics (NTCF) in India and the second-largest in the world. It is the second-largest manufacturer of conveyor belting fabrics in the world. This business segment has significant exposure to the tyre industry. The slowdown in the automobile industry led to de-growth of 8% CAGR over FY16-21. Thus, the segmental contribution to the overall revenue has declined from 39% in FY16 to 15% in FY21 although EBIT margin for the segment improved from 10% in FY16 to 14% in FY21. TTB clocked in the highest-ever EBIT margin in a quarter at 27% in Q1FY22, owing to the restructuring of margin profile with long-term customers. However, we expect margins to correct to 11% in FY24E and TTB to grow at a 6% CAGR over FY22-24E, which is attributable to (1) recovery in the auto industry and (2) positive performance of belting fabrics & polyester industrial yarn sub-segments.

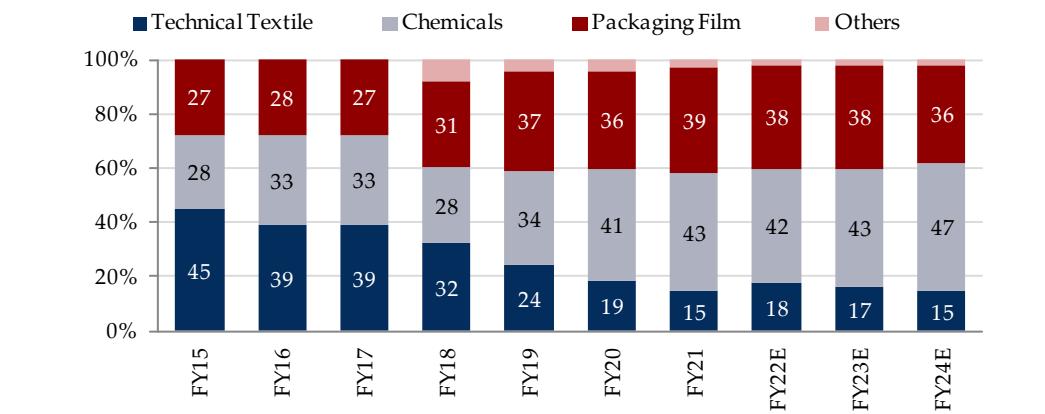
- Heavy investments in Capex, a future growth lever:** SRF has always invested heavy Capex for its refrigerant gas, speciality chemicals and packaging films business. It plans to incur Capex of INR ~20/21bn in FY22/23E. Capacity expansion and plan to launch at least 3-4 new products every year will sustain growth momentum.
- Financial performance and outlook:** We expect SRF's PAT to grow at a 15% CAGR over FY22-24E, led by 15% CAGR in revenue. Revenue growth is expected to be driven primarily by 22% revenue CAGR in chemicals segment, 12% revenue CAGR in packaging films business, and 6% CAGR in technical textiles business. We expect a strong FCF generation of INR 13.9bn over FY22-24E, and healthy RoCE/RoE of 17/22% in FY24E. The stock is currently trading at 27.8x FY24E EPS.

## Exhibit 26: Revenue, growth, and EBITDA margin



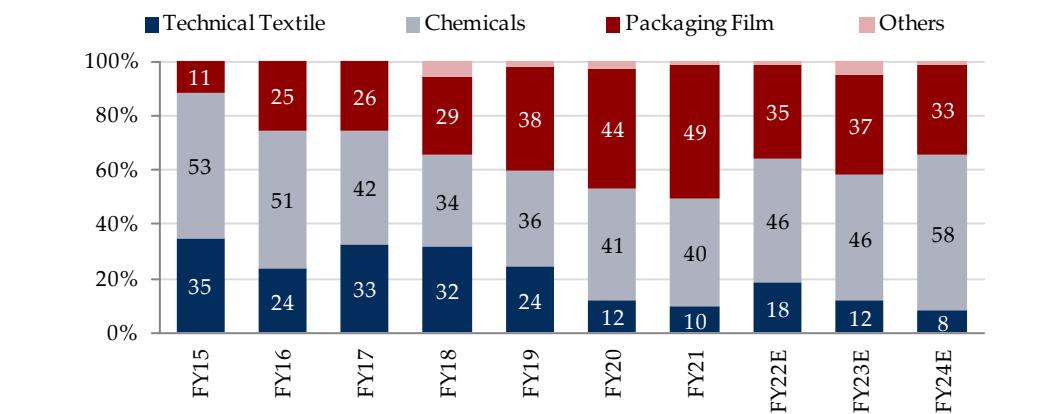
Source: Company, HSIE Research

## Exhibit 27: Segmental revenue mix (%)



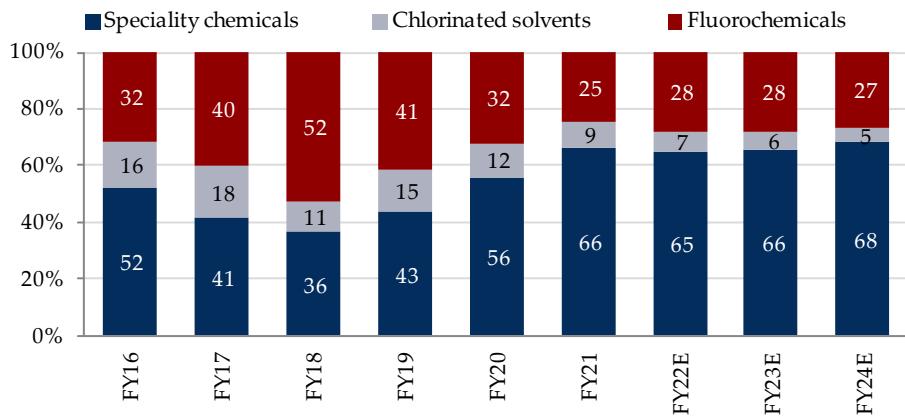
Source: Company, HSIE Research

## Exhibit 28: Segmental EBIT mix (%)



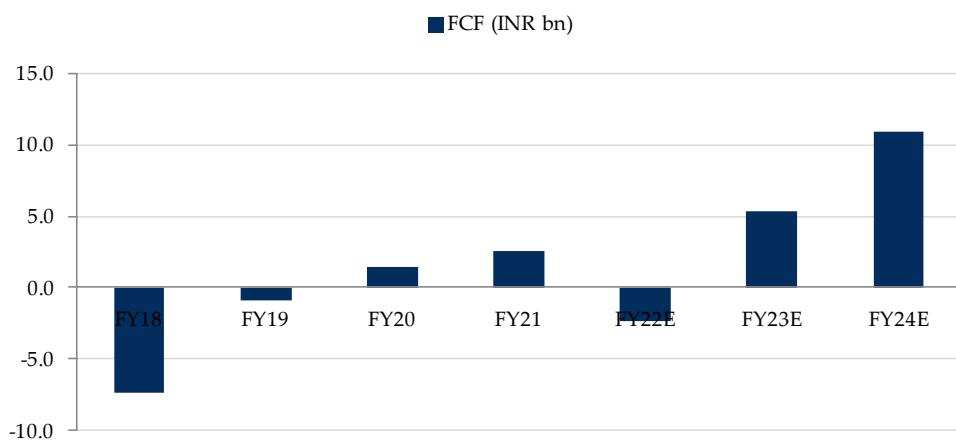
Source: Company, HSIE Research

## Exhibit 29: Revenue mix of chemical business to be skewed towards spec chem



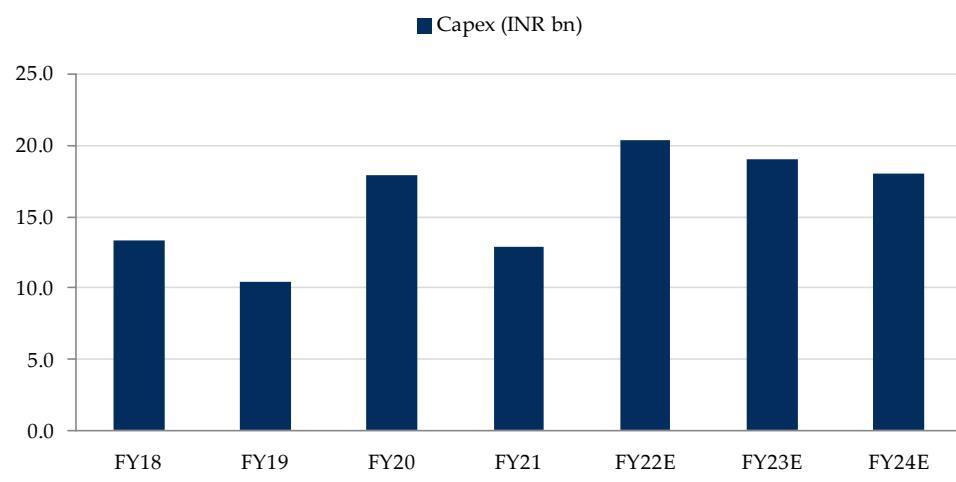
Source: Company, HSIE Research

## Exhibit 30: Strong FCF generation of INR 13.9bn over FY22-24E



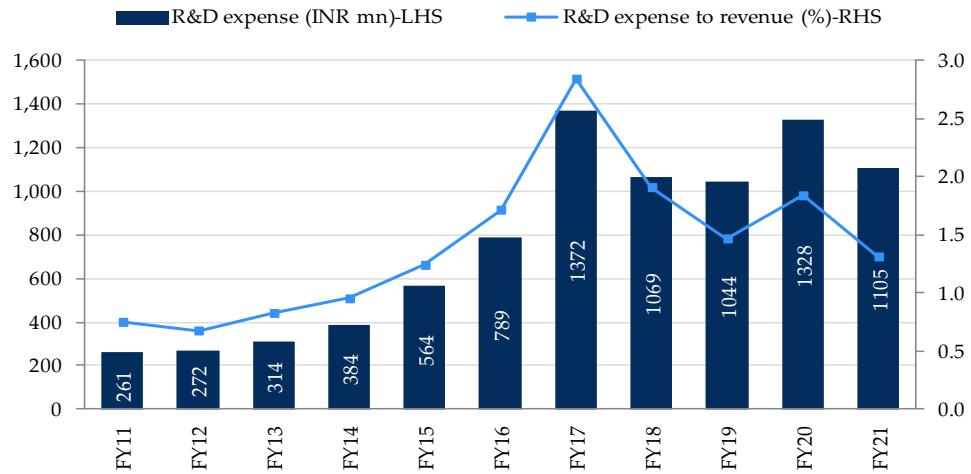
Source: Company, HSIE Research

## Exhibit 31: Aggressive Capex investments to fuel future growth



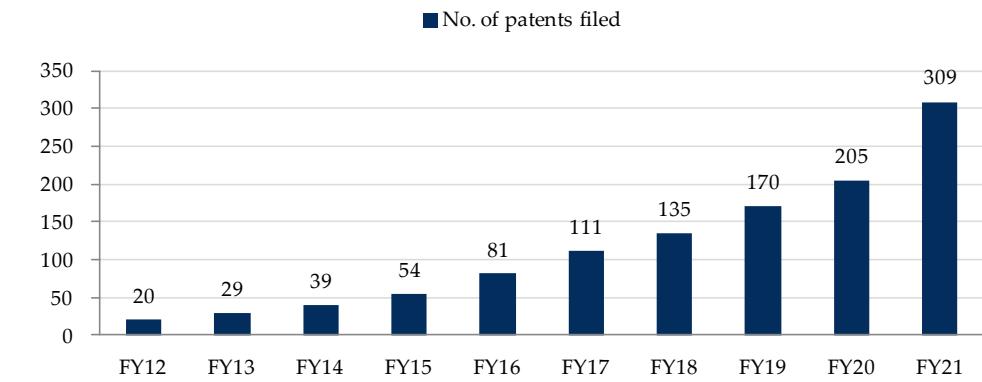
Source: Company, HSIE Research

## Exhibit 32: Impressive R&D spend over FY11-21



Source: Company, HSIE Research

## Exhibit 33: Increasing number of patents filed over the past decade



Source: Company, HSIE Research

## Fluorination: Sector Thematic

### Financials (Consolidated)

#### INCOME STATEMENT

INR mn	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
<b>Net Revenues</b>	<b>47,394</b>	<b>55,108</b>	<b>69,499</b>	<b>70,621</b>	<b>82,954</b>	<b>1,20,589</b>	<b>1,38,246</b>	<b>1,60,455</b>
<i>Growth (%)</i>	<i>4.8</i>	<i>16.3</i>	<i>26.1</i>	<i>1.6</i>	<i>17.5</i>	<i>45.4</i>	<i>14.6</i>	<i>16.1</i>
Material Expenses	24,188	30,320	39,671	36,870	40,190	59,943	72,295	83,595
Employee Expenses	4,338	4,740	4,608	5,419	6,214	7,892	8,365	9,118
Other Operating Expenses	9,998	11,768	13,747	15,256	16,264	23,094	24,827	28,551
<b>Operating Profits</b>	<b>8,870</b>	<b>8,280</b>	<b>11,473</b>	<b>13,077</b>	<b>20,287</b>	<b>29,660</b>	<b>32,758</b>	<b>39,192</b>
<i>Operating Profit Margin (%)</i>	<i>18.7</i>	<i>15.0</i>	<i>16.5</i>	<i>18.5</i>	<i>24.5</i>	<i>24.6</i>	<i>23.7</i>	<i>24.4</i>
Other Operating Income	824	782	1,497	1,473	1,046	1,099	1,154	1,211
<b>EBIDTA</b>	<b>9,694</b>	<b>9,062</b>	<b>12,970</b>	<b>14,549</b>	<b>21,333</b>	<b>30,759</b>	<b>33,912</b>	<b>40,403</b>
<i>EBIDTA Margin (%)</i>	<i>20.1</i>	<i>16.2</i>	<i>18.3</i>	<i>20.2</i>	<i>25.4</i>	<i>25.3</i>	<i>24.3</i>	<i>25.0</i>
<i>EBITDA Growth (%)</i>	<i>0.7</i>	<i>(6.5)</i>	<i>43.1</i>	<i>12.2</i>	<i>46.6</i>	<i>44.2</i>	<i>10.3</i>	<i>19.1</i>
Depreciation	2,834	3,158	3,582	3,886	4,531	5,295	5,954	6,808
Other Income (Including EO Items)	730	1,151	280	491	664	1,100	1,144	1,190
<b>EBIT</b>	<b>7,590</b>	<b>7,056</b>	<b>9,668</b>	<b>11,154</b>	<b>17,466</b>	<b>26,564</b>	<b>29,103</b>	<b>34,785</b>
Interest	1,018	1,239	1,984	2,007	1,340	1,332	1,590	1,515
<b>PBT</b>	<b>6,572</b>	<b>5,817</b>	<b>7,684</b>	<b>9,147</b>	<b>16,126</b>	<b>25,232</b>	<b>27,512</b>	<b>33,269</b>
Tax	1,422	1,200	1,769	(12)	4,144	6,560	7,098	8,384
Net Profit from Discontinued Operations	-	-	501	1,032	(3)	-	-	-
<b>RPAT</b>	<b>5,150</b>	<b>4,617</b>	<b>6,416</b>	<b>10,191</b>	<b>11,979</b>	<b>18,672</b>	<b>20,414</b>	<b>24,885</b>
EO (Loss) / Profit (Net Of Tax)	303	631	119	176	344	-	-	-
<b>APAT</b>	<b>4,847</b>	<b>3,986</b>	<b>6,297</b>	<b>10,015</b>	<b>11,635</b>	<b>18,672</b>	<b>20,414</b>	<b>24,885</b>
<i>APAT Growth (%)</i>	<i>16.7</i>	<i>(17.8)</i>	<i>58.0</i>	<i>59.0</i>	<i>16.2</i>	<i>60.5</i>	<i>9.3</i>	<i>21.9</i>
<b>Adjusted EPS (Rs)</b>	<b>16.6</b>	<b>13.6</b>	<b>21.6</b>	<b>34.3</b>	<b>39.8</b>	<b>63.9</b>	<b>69.9</b>	<b>85.2</b>
<i>EPS Growth (%)</i>	<i>16.7</i>	<i>(17.8)</i>	<i>58.0</i>	<i>59.0</i>	<i>16.2</i>	<i>60.5</i>	<i>9.3</i>	<i>21.9</i>

Source: Company, HSIE Research

#### BALANCE SHEET

INR mn	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
<b>SOURCES OF FUNDS</b>								
Share Capital	584	584	585	585	603	2,962	2,962	2,962
Reserves	31,242	35,061	40,708	48,748	67,962	82,407	1,00,779	1,23,176
<b>Total Shareholders' Funds</b>	<b>31,827</b>	<b>35,645</b>	<b>41,293</b>	<b>49,333</b>	<b>68,564</b>	<b>85,369</b>	<b>1,03,741</b>	<b>1,26,138</b>
Long-term Debt	14,319	19,073	21,613	23,116	19,650	22,650	21,650	19,650
Short-term Debt	5,456	8,508	11,274	9,554	9,657	9,657	9,657	9,657
<b>Total Debt</b>	<b>19,774</b>	<b>27,580</b>	<b>32,887</b>	<b>32,671</b>	<b>29,307</b>	<b>32,307</b>	<b>31,307</b>	<b>29,307</b>
Net Deferred Taxes	2,840	2,914	3,420	1,612	3,680	3,680	3,680	3,680
Long Term Provisions & Others	596	676	566	1,484	1,507	1,507	1,507	1,507
<b>TOTAL SOURCES OF FUNDS</b>	<b>55,037</b>	<b>66,816</b>	<b>78,166</b>	<b>85,100</b>	<b>1,03,058</b>	<b>1,22,863</b>	<b>1,40,236</b>	<b>1,60,632</b>
<b>APPLICATION OF FUNDS</b>								
Net Block	44,000	51,175	56,053	63,670	78,263	80,310	89,497	99,521
CWIP	2,586	5,588	7,536	13,933	7,723	20,736	24,618	25,809
Good will	49	41	41	6	6	6	6	6
Investments	251	1	1	42	42	42	42	42
LT Loans & Advances	2,003	2,324	3,335	1,562	3,690	2,740	2,740	2,740
Inventories	8,381	9,582	12,247	12,012	14,658	21,235	24,325	28,211
Debtors	6,569	6,807	10,288	8,911	12,746	18,464	21,151	24,530
Cash & Equivalents	2,669	2,184	2,994	3,240	6,945	6,446	8,313	14,432
Other Current Assets	3,175	5,929	6,384	5,250	5,040	5,040	5,040	5,040
<b>Total Current Assets</b>	<b>20,794</b>	<b>24,501</b>	<b>31,913</b>	<b>29,412</b>	<b>39,389</b>	<b>51,185</b>	<b>58,830</b>	<b>72,214</b>
Creditors	8,089	10,442	13,824	11,117	15,852	22,964	26,306	30,508
Other Current Liabilities	6,557	6,372	6,889	12,408	10,202	9,191	9,191	9,191
<b>Total Current Liabilities</b>	<b>14,646</b>	<b>16,814</b>	<b>20,713</b>	<b>23,525</b>	<b>26,054</b>	<b>32,155</b>	<b>35,497</b>	<b>39,699</b>
<b>Net Current Assets</b>	<b>6,148</b>	<b>7,687</b>	<b>11,200</b>	<b>5,887</b>	<b>13,335</b>	<b>19,030</b>	<b>23,333</b>	<b>32,515</b>
<b>TOTAL APPLICATION OF FUNDS</b>	<b>55,037</b>	<b>66,816</b>	<b>78,166</b>	<b>85,100</b>	<b>1,03,058</b>	<b>1,22,863</b>	<b>1,40,236</b>	<b>1,60,632</b>

Source: Company, HSIE Research

## Fluorination: Sector Thematic

### CASH FLOW STATEMENT

INR mn	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
Reported PBT	6,572	5,817	8,185	10,179	16,123	25,232	27,512	33,269
Non-operating & EO Items	(730)	(1,151)	(280)	(491)	(664)	(1,100)	(1,144)	(1,190)
Interest Expenses	1,018	1,239	1,984	2,007	1,340	1,332	1,590	1,515
Depreciation	2,834	3,158	3,582	3,886	4,531	5,295	5,954	6,808
Working Capital Change	(1,461)	(2,023)	(2,704)	5,559	(3,742)	(6,194)	(2,436)	(3,062)
Tax Paid	(1,105)	(1,126)	(1,263)	(1,795)	(2,076)	(6,560)	(7,098)	(8,384)
<b>OPERATING CASH FLOW ( a )</b>	<b>7,128</b>	<b>5,913</b>	<b>9,504</b>	<b>19,345</b>	<b>15,512</b>	<b>18,004</b>	<b>24,378</b>	<b>28,957</b>
Capex	(7,170)	(13,327)	(10,408)	(17,865)	(12,914)	(20,355)	(19,023)	(18,023)
<i>Free Cash Flow (FCF)</i>	(42)	(7,414)	(903)	1,480	2,598	(2,351)	5,355	10,933
Investments	1,549	250	0	(41)	-	-	-	-
Non-operating Income	730	1,151	280	491	664	1,100	1,144	1,190
Others	(1,700)	(321)	(1,012)	1,773	(2,127)	950	-	-
<b>INVESTING CASH FLOW ( b )</b>	<b>(6,590)</b>	<b>(12,247)</b>	<b>(11,139)</b>	<b>(15,642)</b>	<b>(14,378)</b>	<b>(18,305)</b>	<b>(17,879)</b>	<b>(16,834)</b>
Debt Issuance/(Repaid)	(1,523)	7,806	5,307	(217)	(3,364)	3,000	(1,000)	(2,000)
Interest Expenses	(1,018)	(1,239)	(1,984)	(2,007)	(1,340)	(1,332)	(1,590)	(1,515)
FCFE	(2,582)	(847)	2,420	(744)	(2,106)	(682)	2,765	7,418
Share Capital Issuance	-	-	1	-	18	2,360	-	-
Dividend	(829)	(829)	(836)	(969)	(1,408)	(1,867)	(2,041)	(2,489)
<b>FINANCING CASH FLOW ( c )</b>	<b>(3,370)</b>	<b>5,738</b>	<b>2,488</b>	<b>(3,192)</b>	<b>(6,093)</b>	<b>2,161</b>	<b>(4,632)</b>	<b>(6,004)</b>
<b>NET CASH FLOW (a+b+c)</b>	<b>(2,832)</b>	<b>(595)</b>	<b>853</b>	<b>510</b>	<b>(4,960)</b>	<b>1,860</b>	<b>1,868</b>	<b>6,119</b>
EO Items, Others	3	111	(43)	(264)	8,665	(2,360)	-	-
<b>Closing Cash &amp; Equivalents</b>	<b>2,669</b>	<b>2,184</b>	<b>2,994</b>	<b>3,240</b>	<b>6,945</b>	<b>6,446</b>	<b>8,313</b>	<b>14,432</b>

Source: Company, HSIE Research

### KEY RATIOS

	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
<b>PROFITABILITY %</b>								
Gross Margin	49.8	45.8	44.1	48.9	52.2	50.7	48.1	48.3
EBITDA Margin	20.1	16.2	18.3	20.2	25.4	25.3	24.3	25.0
EBIT Margin	15.7	12.6	13.6	15.5	20.8	21.8	20.9	21.5
APAT Margin	10.1	7.1	8.9	13.9	13.9	15.3	14.6	15.4
RoE	16.3	11.8	16.4	22.1	19.7	24.3	21.6	21.7
Core RoCE	11.1	7.6	12.5	17.6	16.0	21.1	20.9	22.5
RoCE	10.6	8.2	10.8	14.7	13.4	17.4	16.4	17.3
<b>EFFICIENCY</b>								
Tax Rate %	21.6	20.6	23.0	(0.1)	25.7	26.0	25.8	25.2
Asset Turnover (x)	0.9	0.9	1.0	0.9	0.9	1.1	1.1	1.1
Inventory (days)	63	63	63	61	64	64	64	64
Debtor (days)	50	44	53	45	55	55	55	55
Other Current Assets (days)	24	39	33	27	22	15	13	11
Payables (days)	61	68	71	56	69	69	69	69
Other Current Liab & Provns (days)	50	42	35	63	44	28	24	21
Cash Conversion Cycle (days)	26	36	42	13	28	38	39	41
Net Debt/EBITDA (x)	1.8	2.8	2.3	2.0	1.0	0.8	0.7	0.4
Net D/E	0.5	0.7	0.7	0.6	0.3	0.3	0.2	0.1
Interest Coverage	7.5	5.7	4.9	5.6	13.0	19.9	18.3	23.0
<b>PER SHARE DATA (Rs)</b>								
EPS	16.6	13.6	21.6	34.3	39.8	63.9	69.9	85.2
CEPS	26.3	24.5	33.8	47.6	55.3	82.0	90.3	108.5
DPS	12.0	12.0	12.0	14.0	24.0	6.4	7.0	8.5
BV	108.9	122.0	141.3	168.9	234.7	292.2	355.1	431.8
<b>VALUATION</b>								
P/E (x)	142.5	173.3	109.7	69.0	59.4	37.0	33.8	27.8
P/Cash EPS (x)	89.9	96.7	69.9	49.7	42.7	28.8	26.2	21.8
P/BV (x)	21.7	19.4	16.7	14.0	10.1	8.1	6.7	5.5
EV/EBITDA (x)	73.0	79.0	55.6	49.5	33.4	23.3	21.0	17.5
EV/Revenue (x)	14.7	12.8	10.1	10.0	8.5	5.9	5.1	4.4
OCF/EV (%)	1.0	0.8	1.3	2.7	2.2	2.5	3.4	4.1
FCFF/EV (%)	(0.0)	(1.0)	(0.1)	0.2	0.4	(0.3)	0.8	1.5
FCFE/M CAP (%)	(0.4)	(0.1)	0.4	(0.1)	(0.3)	(0.1)	0.4	1.1
Dividend Yield (%)	0.5	0.5	0.5	0.6	1.0	0.3	0.3	0.4

Source: Company, HSIE Research

## Gujarat Fluorochemicals Ltd (Not Rated)

Gujarat Fluorochemicals Ltd (GFL) is a leading producer of fluoropolymers, fluorospecialities, refrigerants and chemicals, which find application in automotive, modern architecture, food processing, chemical processing, agrochemical and pharmaceutical industries.

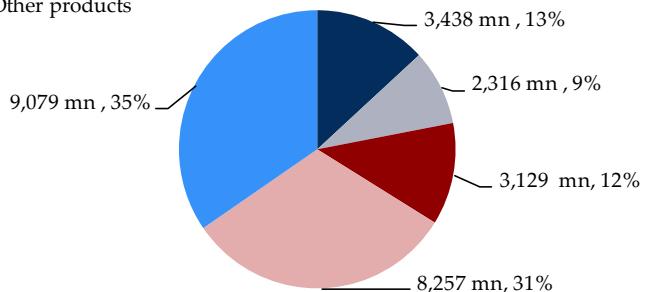
It was incorporated in 1987 and commenced its operations in 1989, by establishing India's largest refrigerant manufacturing unit at Ranjitnagar, Gujarat. This site was further expanded to produce fluorospecialty products catering to the growing demands in global agriculture and pharmaceutical industry. The company established integrated facilities at Dahej in 2007, which has helped it diversify its fluoropolymers to PTFE, PFA, FEP, FKM, PVDF and fluoropolymer additives. GFL is the only fluoropolymer producer in India and amongst the top few globally.

GFL has three manufacturing facilities in India (in Ranjitnagar, Dahej and Jolva), a captive fluorspar mine in Morocco, and operates through an integrated value chain in fluorine chemistry. The company exports to over 75 countries, has offices and warehouses in the EU and US, and its marketing network is spread across the world. The company derives ~49% of its revenue from exports. The company also has inhouse research and development (R&D) team comprising 94 employees.

GFL has allocated INR 25bn in Capex over FY22-24E towards expanding its capacities for bulk & speciality chemicals, fluoropolymers and new-age products. It plans to foray into new-age industries such as electric vehicles (PVDF electrode binders, battery chemicals, LiPF6, electrolyte formulations, battery casing and additives); solar panels (PVDF films and back-sheets); and hydrogen fuel cells/ electrolyzers (fluoropolymers, membranes and charging accessories).

### Exhibit 34: Product-wise revenue split in FY21

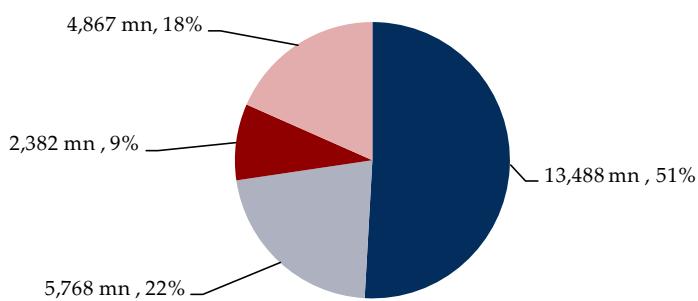
- Refrigerant gases
- Caustic Soda (Caustic Soda Lye & Flakes)
- Chloromethanes (Methylene Chloride, Chloroform and Carbon Tetrachloride)
- Poly Tetrafluoroethylene (PTFE)
- Other products



Source: Company, HSIE Research

### Exhibit 35: Geographical revenue mix in FY21

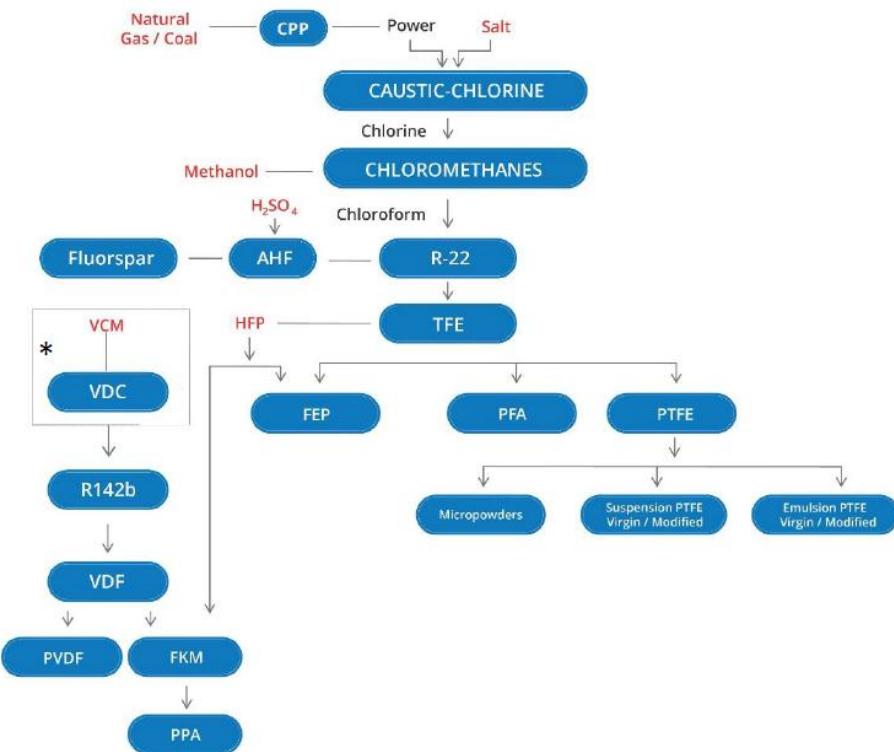
- India
- Europe
- USA
- Rest of the world



Source: Company, HSIE Research

## Fluorination: Sector Thematic

### Exhibit 36: High level of backward-integration in the company



Source: Company, HSIE Research | \*- proposed

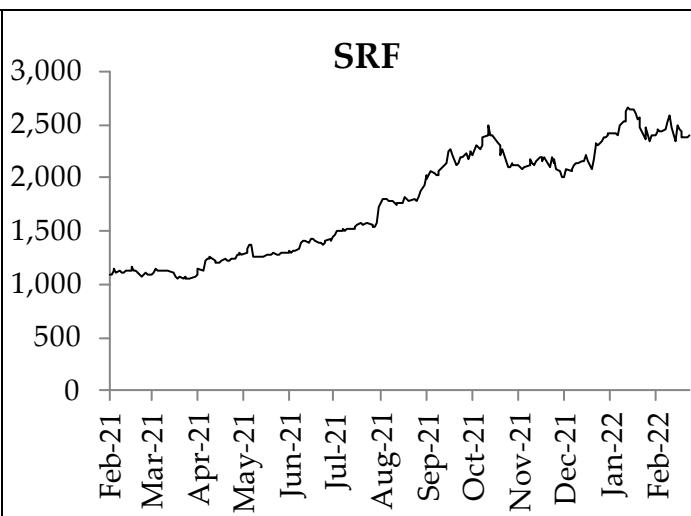
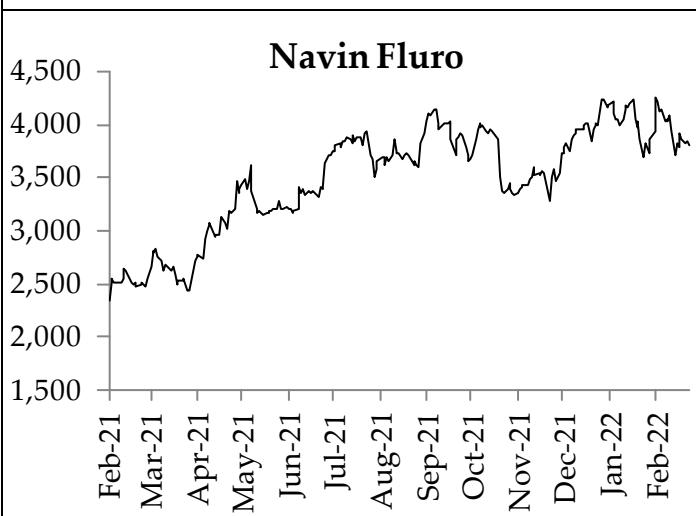
**Promoter group:** GFL is a part of the INOX Group of companies. The group has diversified business segments comprising chemicals, fluorospecialities, fluoropolymers, cryogenic engineering, entertainment, industrial gases and renewable energy. The group companies are Gujarat Fluorochemicals Limited, INOX India Private Limited, INOX Leisure Limited, INOX Wind Limited, INOX Renewables Limited, and INOX Air Products.

## Fluorination: Sector Thematic

### Exhibit 37: Change in estimates, TP and rating

Company	CMP (INR)	Rating		TP		Old EPS			New EPS			Est Change (%)		
		Old	New	Old	New	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
NFIL	3,863	ADD	BUY	4,025	4,905	50.4	67.6	89.5	54.3	85.0	124.9	7.8	25.8	39.5
SRF	2,364	ADD	ADD	2,380	2,675	55.5	62.0	70.8	63.9	69.9	85.2	15.1	12.7	20.4

Source: Company, HSIE Research | CMP considered for the above table is the closing share price on 22 Feb 2022

**1 Yr Price movement****Rating Criteria**

BUY: &gt;+15% return potential

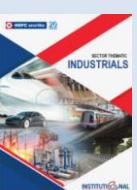
ADD: +5% to +15% return potential

REDUCE: -10% to +5% return potential

SELL: &gt;10% Downside return potential

# Fluorination: Sector Thematic

## Thematic reports by HSIE

						
Cement: WHRS – A key cog in the flywheel	Autos: Where are we on "S" curve?	FMCG: Defensive businesses but not valuations	Autos: A changed landscape	Banks: Double whammy for some	India Equity Strategy: Atma Nirbhar Bharat	Indian IT: Demand recovery in sight
						
Life Insurance: Recovery may be swift with profit margins	Retail: Whole flywheel is broken?	Appliances: Looing beyond near-term disruption	Pharma: Chronic therapy – A portfolio prescription	Indian Gas: Looking beyond the pandemic	India Equity Strategy: Quarterly flipbook	Real Estate: Ripe for consumption
						
Indian IT: expanding centre of gravity	Indian Chemical: Evolution to revolution!	Life Insurance: ULIP vs. MF	Infrastructure: On the road to rerating	Cement: Spotting the sweet spot	Pharma: Cardiac: the heartbeat of domestic market	Life Insurance: Comparative annual report analysis
						
Indian microfinance: Should you look micro as macros disappoint?	India Equity Strategy: Quarterly flipbook	Autos: Divergent trends in PVs and 2Ws	India Internet: the stage is set	FMCG: Opportunity in adversity - A comparative scorecard	Logistics: Indian Railways - getting aggressive	Industrials: Triggering a new cycle
						
Indian IT: raising the bar	India Equity Strategy: Quarterly flipbook	FinTech Playbook: P2M Payments   Surging pool, dwindling yields	India Hospitals: capital discipline improving, sustenance is key	Autos: Will EVs impact the 'EV'?	Cement: Riding High	Power: Reforms essential for renaissance
						
Fashion & Lifestyle: From a disruptor's lens II	India Equity Strategy: Quarterly flipbook	Indian Gas Sector: Resilience in the eye of the storm	Consumer Durables: Fans - a compounding story but underrated	Quarterly flipbook: Q2FY22 - Demand environment improves but input cost inflation dents profitability	FinTech Playbook: Discount Brokers	Footwear: No bargains here!
						
Holdcos for portfolio diversification	Cement: A concrete road for net-zero emissions	FinTech Playbook: Buy Now Pay Later   De-mystifying the tablestakes	Institutional Investors' shareholding pattern - A key to spot potential gems	Real Estate: On a cyclical high		

# Fluorination: Sector Thematic

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