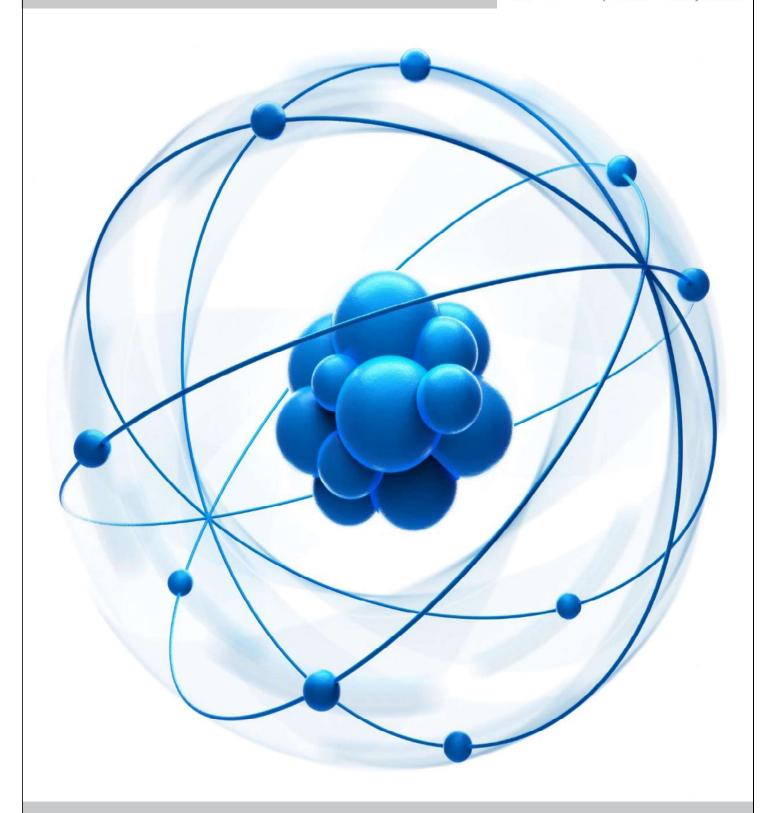
Edelweiss Professional Investor Research Insightful. Independent. Decisive.

Neogen Chemicals Ltd

Edelweiss -

PMS • AIF • Prop Funds • Family offices

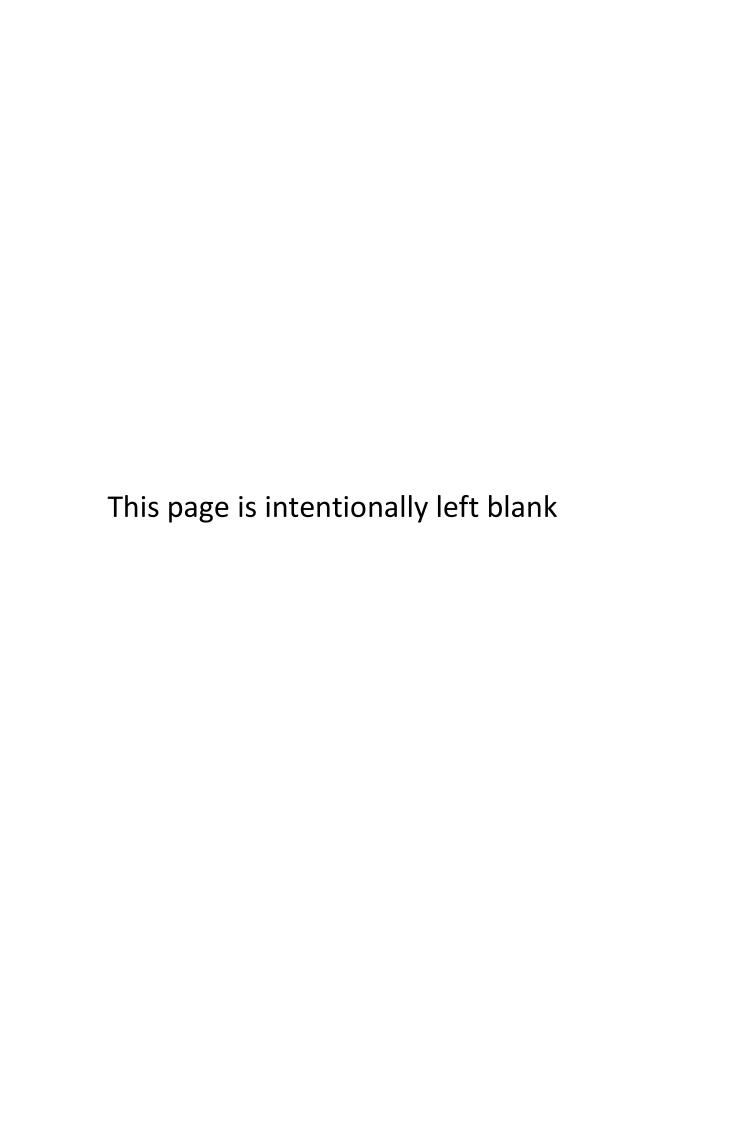


Swarnabha Mukherjee

Research Analyst

Swarnabha.Mukherjee@edelweissfin.com

Date: 02 December 2020



Long Term Recommendation Neogen Chemicals Ltd

Transitioning into a CSM player

Neogen Chemicals (Neogen) is a play on the niche segment of organic bromine derivatives. Large opportunity size (~15x of current revenue), technocratic promoters, impetus on research, strong relationships with marquee customers to whom they supply intermediates for regulated end industries are sources of competitive advantage for the company. With continued strong demand, 1.8x increase in capacity coming on-stream in Q4FY21/FY22 and two recently inked long-term contracts with innovator companies that demonstrate success in its custom synthesis business, we remain positive on Neogen's growth prospects.

Niche products with entry barriers and strong demand; capex to aid growth

Neogen manufactures organobromides (~80% of revenue) and inorganic lithium salts (~20%). Organobromides see strong demand from pharma and agrochemical industries. Difficulty in handling bromine, R&D driven product development, and specialty nature of products act as entry barriers. We expect the Organic Chemicals segment to clock 26% CAGR over FY20-23E, as Dahej greenfield capex phases gets commissioned in Q4FY21/FY22 and the current capacity constraint is mitigated.

Moving up the curve on R&D capabilities; will foster margin expansion

Technocrat promoters (both Mr. Haridas Kanani and Dr. Harin Kanani are IIT Bombay alumni and Mr. Haridas Kanani is a pioneer in bromination in India) have focused on the advanced intermediates and custom synthesis space since FY16 which has started to yield results. This would lead to higher demand, better realizations, improving profitability from value added complex products, strong relationships with innovator customers and better earnings visibility.

Working capital cycle and leverage to see improvement

Shortening WC cycle should aid operating cash generation with focus on tweaking various levers like inventory management, process efficiencies, and favourable credit terms with both customers and suppliers. While debt is the primary source of funding for capex, we expect it to be under control (peak D/E can be at 1.2).

Robust growth ahead; initiating coverage with a BUY rating

We expect Neogen to clock 23%/26%/32% CAGR in revenue/EBITDA/PAT, over FY20-23E. Improving capacity utilization and strengthening of balance sheet are expected to improve ROAE/ROACE over FY21-23E. We initiate coverage with a BUY and a TP of INR 758 (upside of 22%), valuing the company at 27x FY23E earnings.

	FY19	FY20	FY21E	FY22E	FY23E
Revenues (INR cr)	239	306	337	463	572
EBITDA (INR cr)	43	58	61	91	115
EBITDA Margin (%)	18.2	19.0	18.2	19.6	20.1
Net Profit (INR cr)	21	29	30	48	65
Net Profit Margin (%)	8.8	9.4	8.8	10.4	11.5
EPS (INR)	10.5	12.3	12.7	20.6	28.1
EPS Growth (%)	-	17.5	3.5	61.8	36.4
P/E (x)	59.6	50.8	49.1	30.3	22.2
EV/EBITDA (x)	31.5	27.4	26.6	18.2	14.2
RoACE (%)	24.5	21.4	16.3	20.1	22.6
RoAE (%)	34.6	25.2	17.4	23.0	24.8

Swarnabha Mukherjee

Research Analyst

Swarnabha.Mukherjee@edelweissfin.com

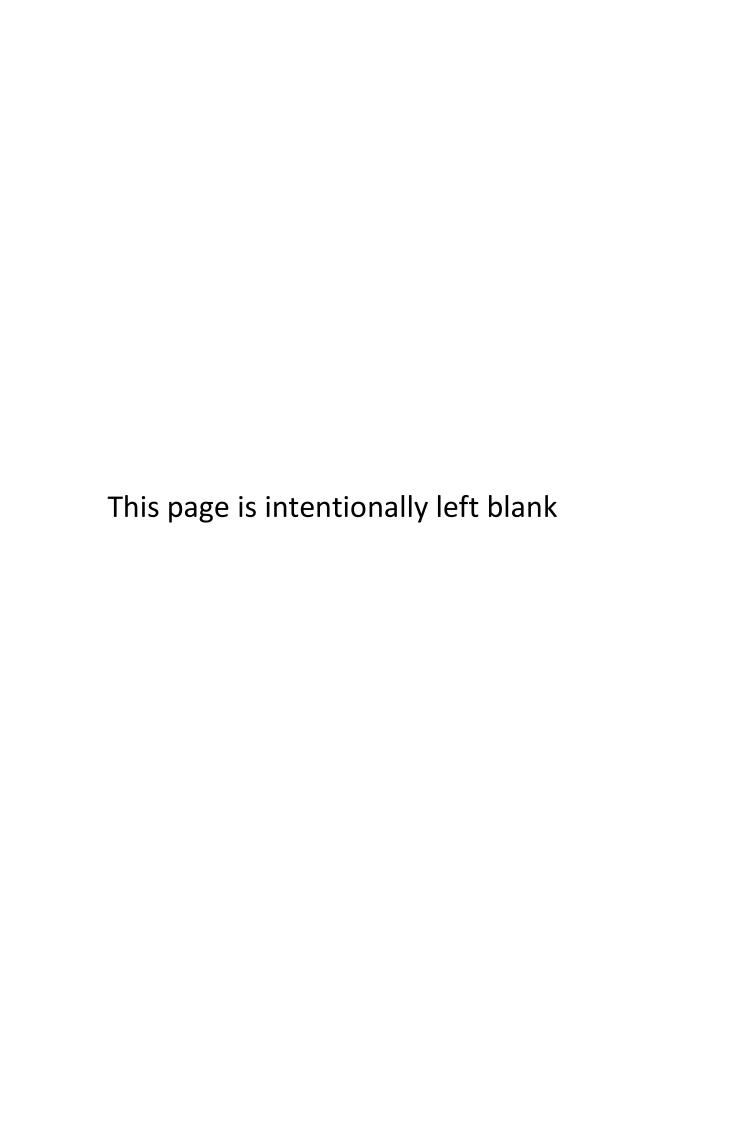
CMP INR: 624 Rating: BUY

Target Price INR: 758

Upside: 22%

Bloomberg:	Neogen:IN
52-week range (INR):	303/ 820
Share in issue (cr):	2.3
M cap (INR cr):	1,467
Promoter Holding (%)	64.32

Date: December 02, 2020



Index

Table of Contents

Structure	3
Focus Charts	5
I. Presence in niche chemistries with 15x opportunity size	7
II. Pioneer in Bromination in India	8
III. Organic Chemicals: Growth engine with large and growing opportunity size	9
IV. Moving up the curve through CSM and long term contracts	12
V. Growth has been backed up by timely capacity expansions	16
VI. Inorganic Chemicals to grow at high single digits	18
VII. Revenue growth to be robust as Organic Chemicals capacity ramps-up	19
VIII. Higher share of value added products to aid margin expansion	20
IX. Focus on strengthening Balance Sheet to improve cash generation	24
Outlook and Valuation	27
Management Profile	30
Financials	31



PMS • AIF • Prop Funds • Family offices

We expect Neogen to clock 23% revenue CAGR over FY20-23E led by:

- a) Strong demand for bromine derivatives from pharma and agrochemical industries;
- b) Specialty nature of products (under 2,000 MTPA global demand) that require R&D capabilities and ability to handle bromine a hazardous chemical. This reduces competitive intensity in the segment and aids customer stickiness;

Structure

- c) Inking of **two long-term contracts** with innovator companies gives revenue visibility could be enhanced by higher-than-committed offtake by these customers and undertaking new contracts (**in discussion with 4-5 other customers**);
- d) **1.8x Increased capacity** post commissioning of the Organic Chemicals facility at Dahej **in two phases in Q4FY21/FY22** will support growth;

Additionally, we expect EBITDA margin to expand from 19.0% in FY20 to 20.1% in FY23E due to

- a) **increasing contribution from profitable businesses** like advanced intermediates for active pharmaceutical or agrochemical ingredients players and custom synthesis and manufacturing
- b) **absorption of fixed cost** as new capex gets optimally utilized.

Improving profitability will also aid PAT CAGR of 32% over FY20-23E.

We expect continued demand from end industries. Further capex will continue the growth trajectory beyond FY23E, while focused efforts by the management towards improving the working capital cycle would aid cash generation.

Large opportunity size, focused and technocratic promoters, R&D capabilities (first R&D centre was started in Mahape from 2000), strong relationships with marquee customers, and intermediates for regulated end industries are sources of competitive advantage for the company, along with the option value that may emerge from success of the CSM business.

We initiate coverage on the stock with a BUY and a target price of INR 758, valuing the company at 27x FY23E EPS.

Strong demand for organic bromine derivatives, available capacity, along with higher contribution from its innovation driven business and long-term contracts to drive revenue growth and margin expansion

RoACE is expected to increase with better utilisation of newer capacities, improving margin profile from product mix changes and gradual enhancement in the working capital cycle

We expect 32% PAT CAGR over FY20-23E. We value Neogen at 27x FY23E EPS and recommend a BUY

INR crore	FY20	FY21E	FY22E	FY23E
Revenue	306	337	463	572
EBITDA	58	61	91	115
EBITDA margin	19.0%	18.2%	19.6%	20.1%
PAT margin	9.4%	8.8%	10.4%	11.5%

	FY20	FY21E	FY22E	FY23E
ROACE	21%	16%	20%	23%
Debt-to- equity ratio	0.9	0.9	0.9	0.6

	FY23E EPS	Target
27x	28.1	758

At the current market price, the stock is trading at an FY23E P/E of 22x Expect Return on Equity (RoE) to improve over FY21-23E



At our target price, the stock is trading at FY23E P/E of 27x

Upside: 22%

Structure

	Nature of industry	Neogen's products – organic bromine derivatives and lithium salts – cater to a specialised industry (characterised by global annual volumes of less than 2,000 metric tonne (MT) for individual products) with few competitors worldwide. Its foray into R&D driven advanced intermediates and custom synthesis would further enhance its competitive position.
	Opportunity size	Opportunity size is large compared to its current size. As per the management, the market size for its organic and inorganic chemicals stands at around INR 4,000 crore and INR 1,200 crore, respectively, for the current set of molecules in its product portfolio. This will increase with new product additions (advanced intermediates can add further INR 2,000-3,000 crore).
	Capital allocation	Technocratic promoters have been allocating capital to its core business only. Return on capital employed (RoCE) has also remained consistently above 20% level (except in FY21E when substantial gross block will be added).
Business value drivers	Predictability	Historically, product offtake has remained robust, particularly in the organic segment (which contributes around 80% of turnover). Revenue growth has hence been largely a function of capacity available to sweat. This is largely due to its sizeable exposure to the pharmaceutical and agrochemical industry in the area of innovator/patented products, where demand is defensive reflecting consistent R&D spends of customers.
	Sustainability	Neogen's products are key intermediates used in manufacture of pharma APIs or agrochemical active ingredients. The <i>building blocks</i> nature of these products lends comfort on its sustainability in non-discretionary and regulated markets. Further, inclusion as a vendor in Drug Master Files (DMF) in regulated market enhances sustainability of business.
	Business strategy and planned initiatives	 The management is currently focusing on the following strategies to facilitate growth and revenue sustainability: a) Increasing capacity through greenfield expansion at Dahej to cater to the strong demand, as Organic Chemicals capacity is running at peak utilization. b) Neogen had initially planned doubling of capacity but had recently committed further capex to cater for increased requirement with the two long-term contracts coming on board and more on the way. c) Focusing on delivering products with complex chemistries via advanced intermediates and custom synthesis that increases opportunity size, realizations and hence profitability of incremental business. d) This would also foster competitive advantage development as Neogen moves further into niche area where R&D capabilities remain key e) With large share in domestic market, Neogen plans to tap into overseas markets to grow its Inorganic Chemicals business f) Strengthening of balance sheet by shortening working capital cycle and controlling debt levels
	Near-term visibility	Growth visibility in the near term remains robust due to strong demand from existing products as well as the new contracts, which will be supported by commissioning of substantial capacity at Dahej.
	Long-term visibility	 Neogen's long-term growth (post FY23E) is expected to be sustained by: a) Large opportunity size and new products/long-term contracts; b) Increasing depth (multi-step product development/ process chemistry) and breadth (increasing competency in allied chemistries) in its chemistry skills through R&D initiatives; and c) Strong relationships with customers who are global innovators based out of Europe and Japan
	Risk factors	Risk related to working capital management remains key. Neogen has a long working capital cycle. While management is focusing on reducing the cycle, any challenges on the same could deteriorate risk

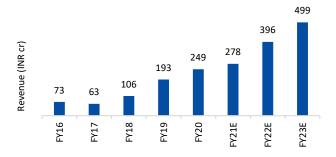
perception, delay cash generation and increase debt levels.



Focus Charts

Story in a nutshell

Exhibit 1: Strong growth in organic chemicals is expected...



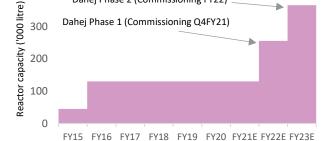


Exhibit 2: ...to be driven by ramp-up of new capacities...

Dahej Phase 2 (Commissioning FY22)

Exhibit 3: ...and new product development

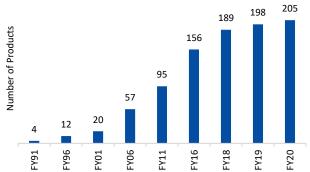


Exhibit 4: Increasing contribution of more profitable segments like advanced intermediates and CSM...

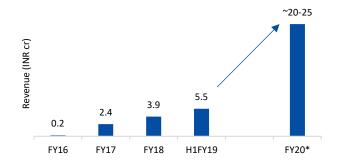
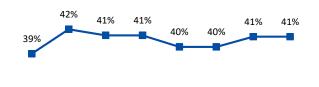
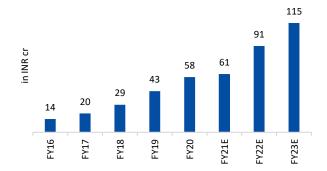


Exhibit 5: ...would play a key role in gross margin expansion,... Exhibit 6: ...growth in EBITDA ...

社 社 社 社 社 社 社 社 社 Contribution of CSM segment. Management indicates that contribution of CSM business is ~8-10%.







Focus Charts

Exhibit 7: ...and improvement in EBITDA margin.

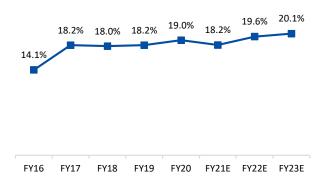


Exhibit 8: Total revenue to grow by 23% CAGR over FY20-23E...

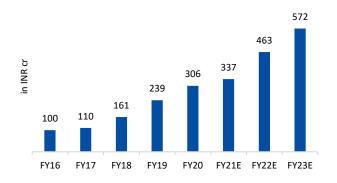


Exhibit 9: ...with PAT growth rate of 32% p.a. over FY20-23E

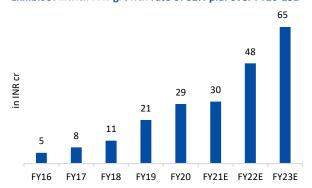


Exhibit 10: Better debt management...

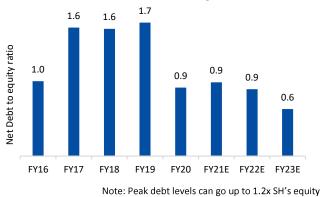


Exhibit 11: ...and improving business metrics...

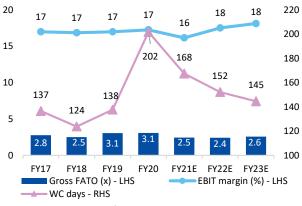
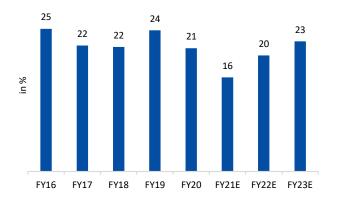
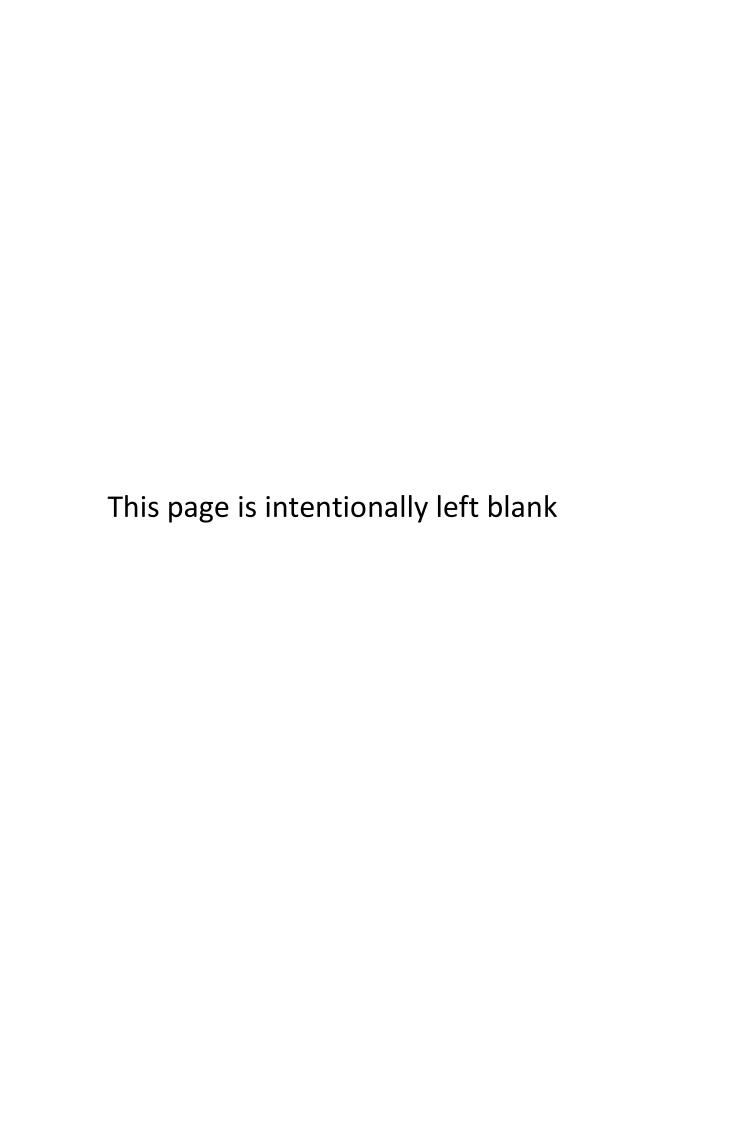


Exhibit 12: ...will help improve ROACE profile going forward



Note: Management is focusing on shortening WC cycle. FATO: Fixed asset turnover



Investment Hypothesis

I. Presence in niche chemistries with 15x opportunity size

a. Leading player in organic bromine/ inorganic lithium derivatives

Neogen is a leading manufacturer of bromine- and lithium-based specialty chemicals, which go into a host of end-user industries like pharma, agrochemicals, engineering liquids, electronic chemicals, aroma chemicals, flavours and fragrances, specialty polymers and cooling medium. With a marquee set of customers which include global innovators, Neogen is consistently moving up the technical curve through its R&D initiatives, particularly in the organic bromine derivatives segment. *The company is slowly transitioning into a manufacturer of products with complex chemistry, with custom synthesis and manufacturing services*. We highlight Neogen's business in Exhibit 13.

Exhibit 13: Brief overview of Neogen's segments

		Inorganic chemicals		
Segment	Bromine derivatives	Advanced intermediates	Custom synthesis & manufacturing	Lithium derivatives
Business description	This segment manufactures products comprising of bromine and other organic compounds containing chlorine, fluorine and iodine-based combinations. It also produces niche products such as Grignard reagents	Products under this segment are a combination of bromine compounds with other chemistries, which act as a value-added intermediates in APIs, agrochemical AIs and in speciality chemicals like aroma chemicals, polymer additives, etc	In custom synthesis, a product is developed and customised for a specific customer through inhouse R&D. Under contract manufacturing, a product is produced for a single customer using process and technical specifications provided by the customer	Product portfolio in this segment consists of inorganic lithium compounds. The product offerings find application in vapour absorption machines (VAM), HVAC, refrigeration, construction chemicals, pharma and speciality polymer
FY20 Revenue		INR 58 cr (19%)		
(Revenue mix)	~50%	~20%	~10%	
Number of products		20+		
Capacity pre- expansion	Glas	1,200 MTPA		
Capacity Expansion	Phase 1: 126,000 litre Phase 2: 78000 litre glas	1,200 MTPA (Expanded in Q4FY20)		
Capacity post expansion		2,400 MTPA		
Revenue potential post expansion	(Existing: ~INR 250	INR 90-100 cr (dependent on lithium prices)		
End industries	Pharma, agrochemi	HVAC, pharma, others		
Key customers	Sun Pharmaceutical Inc Austin	Thermax, Voltas, Kirloskar		

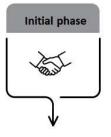
Investment Hypothesis

II. Pioneer in Bromination in India

The company is one of the pioneers in the field of Bromination in India. Mr. Haridas Kanani, Neogen's Founder, Chairman and Managing Director, has been associated with bromine from around 1970 and is also known as the Bromine Man of India. He was instrumental in setting up one of India's first bromine plants using indigenous technology in Gujarat in the 1970s and has worked as a consultant to chemical companies for several years. (Refer to Exhibit 49 for details on management team).

Before he set up Neogen, Mr. Haridas Kanani started manufacturing bromine derivatives in Thane on a smaller scale with a 100 litre reactor capacity in the mid-80s. He founded Neogen in 1989. We highlight various milestones of Neogen's journey in Exhibit 14.

Exhibit 14: Neogen's major milestones



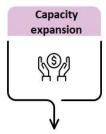
1989-97

- Incorporated in 1989, Neogen Chemicals Pvt Ltd commenced manufacturing of lithium salts and organobromine compounds in 1991
- First incremental capacity came in 1994, rising to 6,000 litres from 1,600 litres



1998-2000

- · Through a special resolution approved by shareholders in 1998, the company was converted from private limited company to a public limited entity
- In 2000, the first dedicated **R&D** facility was set up at Mahape



2001-12

 Significant capacity expansion undertaken in stages, raising total GLR capacity to 45,000 litres from 6,000 litres





2012-15

 Around 2015, it acquired around 50,000 square metres of land at the Dahej Special Economic Zone (SEZ) to support growth in exports business



2016-18

In December

- 2016, it acquired the manufacturing operations of Solaris Chemtech at Karakhadi, Vadodara, along with 40 acres land
- It also acquired 90% stake in partnership firm **Dhara Fine Chem** Industries
- In 2017, its Vadodara facility began manufacturing operations





2019-20

- In 2019, the company's CSM vertical began commercial operations for customers in Europe
- In 2019, Neogen successfully completed public issuance of shares
- In 2020, undertook capacity expansion in Inorganic Chemicals
- In 2020, inked two contracts with innovator companies

III. Organic Chemicals: Growth engine with large and growing opportunity size

a. Manufacturer of primarily specialty pharma and agrochemical intermediates

Neogen's **Organic Chemicals** business segment consists of organic compounds which are:

- Derivatives of bromine e.g. alkyl bromides, dibromo alkanes;
- Derivatives of bromine with combination of other halogen compounds like chlorine, iodine etc e.g. bromo chloro alkanes
- · Specialty chloro compounds
- Grignard reagents

While Neogen has specialised in bromine chemistry, it also has expertise in other chemistries as mentioned above which may be required for developing molecules. However, its core specialisation and strategy towards customer acquisition is anchored on this bromination capability.

These compounds are mostly building blocks of products that go into various end-user industries, and hence are primarily intermediate in nature. For example, an organobromide named n-propyl bromide (which was earlier a key product for Neogen), is an intermediate that goes into Albendazole API and Profenophos AI in the pharma and agrochemical industries, respectively. This is a reason why we believe demand will remain strong and defensive in nature in Neogen's Organic Chemicals portfolio.

For Neogen, pharma and agrochemicals are key end-user industries, contributing around 85% to its organic chemicals business. Other industries where its organic chemical products find use are electronic chemicals, aroma chemicals and flavours (refer Exhibit 15).

Others

15-20%
Engineering

50-60%
Pharma
Agro

Exhibit 15: Neogen's exposure to end-user industries

Source: Company, Edelweiss Professional Investor Research

Most products in Neogen's basket generally have a global demand of under 2,000 MTPA. As apparent from the volume requirements, products are niche in nature and competition remains limited on the supply side. Neogen does not operate in areas where there is bulk requirement of bromine, such as flame retardants or oil field recovery, as bromine manufacturers generally forward integrate. Details of applications of Bromine are highlighted in section Ill.c. Organobromides are seeing demand from agrochemical and pharmaceutical innovators.

Investment Hypothesis

b. Sizeable opportunity aided by new product additions

Given the large plethora of specialty molecules that require bromination and find use in pharma and agrochemicals, the opportunity size for Neogen remains large (despite small market sizes of individual molecules). The management said the total opportunity size of products in its basket currently stands around INR 4,000 crore as compared to Neogen's FY20 turnover of around INR 249 crore. At current standpoint, we thus estimate it to be around 15x opportunity size for Neogen.

Further headroom for growth will get created as Neogen develops additional products for its customers. A large share of this will come from advanced intermediates, as shown in Exhibit 16.

Exhibit 16: Development of complex products to increase opportunity size for Neogen

Product	Reaction steps	Realizations/kg	Share of portfolio	Opportunity size	
Organobromides	1-2	USD 7-22	Large share currently	Current portfolio INR 4000 cr	

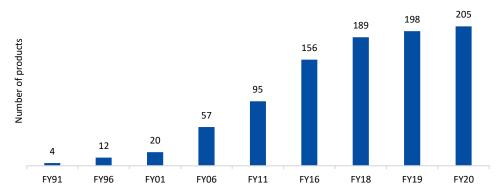
Focus on innovation and ability to undertake complex chemistries driving product development

			Increasing share	New molecules can
		USD 20-100 or	with product	add INR 2,000-
Advanced Intermediates	Multiple steps	more	development	3,000 cr

Note: Realisations are indicative in nature. Source: Company, Edelweiss Professional Investor Research

Generally, new molecules contribute 8-10% of Neogen's annual turnover, excluding molecules developed for the custom synthesis business. Introduction of new products have been quite robust as visible in the increasing number of molecules (refer Exhibit 17), and Neogen is moving up the curve of undertaking more complex chemistries as illustrated in the next section - <u>IV. Moving up</u> the curve through CSM and long-term contracts.

Exhibit 17: Consistent expansion in Neogen's product portfolio



Note: This chart includes both Organic and Inorganic Chemical segments. However, the surge in new products have been driven by primarily Organic Chemicals, as Inorganic Chemicals segment has around 20 products.

Source: Company, Edelweiss Professional Investor Research

Investment Hypothesis

c. Organo-bromides are seeing demand from agrochemical and pharmaceutical innovators

Bromine is a versatile element and can be found in diverse array of natural objects. Bromine based derivatives find application in diverse end uses like flame retardants, pharmaceuticals, oil and gas, crop protection, water treatment among others. We illustrate those in Exhibit 18.

Out of these segments, Neogen is largely focused on specialty products which find application in agrochemical and pharmaceutical segments. Segments like flame retardants, oil and gas and water treatment chemicals are higher volume applications of Bromine.

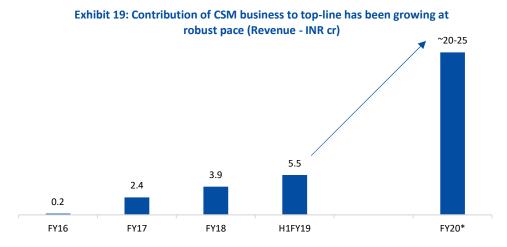
Exhibit 18: Bromine sees application in diverse segments – Pharma and Agro being Neogen's key areas

Industry	Application			
Flame retardant	 Used in electrical components as flame retardants This is the largest application of bromine accounting for 48% global consumption in 2017 Finds application in building and construction, electrical and electronics, furniture, upholstery and textile, and transportation Key products include: Butadiene Styrene Co-polymer, Tetrabromobisphenol A – commonly known as TBBPA – used in electrical and electronic equipment 			
Oil and gas	 Clear brine fluids (CBFs) are used in oil recovery process This accounted for 21% of 2017 global consumption of bromine derivatives High density of CBFs help control extreme pressures in deep wells 			
Pharmaceutical	 Essential intermediates of variety of drugs in following therapies: Pain relievers Expectorants for cough medicines Sleep aids, sedatives, anti-epileptics, tranquilizers Medicine for heart problems Thyroid hyperactivity Hysteria Experimental treatments for Alzheimer's disease, cancer and AIDS. Used as catalyst in preparation of pharmaceutical products to speed up chemical reactions Also used in Grignard reagents which are used for organic synthesis 			
Water treatment	 Used in purification of drinking water and account for 7% of global bromine consumption Products used in this segment are brominated hydantoins and sodium/ammonium bromides. Bromine dissociates in water by forming hypobromous acid (HBrO) which has powerful disinfectant properties, due to its ability to kill the cells of many pathogens. 			
Crop Protection	 Several essential crop protection products are derived from Bromine Modern active ingredients are increasingly seeing introductions of halogen (fluorine, chlorine, bromine and iodine), including mixed halogens that include one or more halogen atom with another. 			
Others	 Used in rubber (bromobutyl rubber), as antiknock additives in leaded gasolines, pollution control applications in power plant and in Electric Vehicles. 			

Note: Segments in which Neogen sees significant exposure are highlighted. Source: Chemtura (Lanxess), BSEF, IHS Markit, Industry Reports, Edelweiss Professional Investor Research

IV. Moving up the curve through CSM and long term contracts

Being technocrats with strong background, Neogen promoters have been focusing on R&D quite early in the journey, with a lion share of the spends going towards Organic Chemicals. *Neogen's first R&D centre was established at their Mahape site in the year 2000 and currently has two R&D centers, in Mahape and Vadodara.* The management started focusing on advanced intermediates and the CSM business from FY16 and is in the process of scaling both businesses. Neogen's first commercial breakthrough in this business happened in FY19 with few products for European customers.



Note: *Estimated contribution of CSM segment. Management indicates that contribution of CSM business is ~8-10%. Source: Company, Edelweiss Professional Investor Research

Advanced intermediates involve forward integration of organobromides with other chemistries to make intermediates which go into final molecules like APIs, Als, specialty polymers, and electronic chemicals. Along with pharma, recent breakthroughs have been seen on the agrochemical side.

The company has developed expertise in CSM, thereby providing tailor-made products to customers, which largely includes innovators or players in their value chain. The molecules are more on the patented side.

Custom synthesis and advanced intermediates are estimated to currently contribute ~30% of revenue at the company level. The management aims to maintain at least the same mix when their greenfield capacity reaches optimal utilisation. It now has a couple of projects at the commercialised stage and few others in the pipeline. Few projects are in advanced stages of research and development.

We expect this segment to contribute more going forward, as Neogen has demonstrated by inking two long-term contracts, details of which are shown in Exhibit 20. Apart from these two contracts, the management are in talks with 4-5 customers for contractual commitment as well. We believe that there is substantial visibility on the outcome, that has led the management to commit an additional capex of INR 55 cr to be commissioned in FY22 (over and above their INR 70 cr capex in the Organic Chemicals segment which is coming on stream in Q4FY21), which would be necessary to cater to both their existing molecules and the new contracts till FY23.

Investment Hypothesis

Exhibit 20: Neogen's long-term contracts for supplying advanced intermediates/custom synthesis

Contract	Customer	Duration	Contract details	Expected Revenue	Other details	Competition		
LTC 1	Innovator	5 years	- Formula linked pricing implying	pricing implying	concrete requiren given for and proj after tha - In anoth volume I committ		- In one contract concrete requirements are given for 2 years, and projections after that - In another, total volume has been committed	
LTC 2	Innovator	6 years	gross margins would be stable - Minimum quantity committed by customer - Customers have option to take more volumes	Min. INR 30-50 cr p.a.	- First commercial trial runs have started - In some contracts, customer has done initial R&D and Neogen has contributed from kilo level to commercialization - One project is under CSM - Other includes one own molecule and another exclusive molecule	- In certain cases, Neogen is the first vendor - In some cases, customer originally planned with Chinese competitor but later approached Neogen - In some cases, customer was looking for second vendor and approached Neogen		
Others	4-5 innovator	s	- R&D stage is over and samples have been approved by customer - In different stages: pilot trial in process, pilot completed etc. and customer taking decision on first commercial order - All engagements are under CSM and advanced intermediates					

Source: Company, Edelweiss Professional Investor Research

Benefiting from the 'China plus one' theme

Management commentary has highlighted that in cases Neogen has seen benefit of diversification of supply chain from China. As we highlighted in our thematic <u>Catalytic Substitution in Play</u>, we expect this theme to play out going forward, and R&D driven specialty chemicals manufacturers like Neogen to benefit from the trend.

Investment Hypothesis

We believe Neogen is in a sweet spot to capitalize on this opportunity, due to the following factors:

- <u>Presence in the niche chemistry of specialty bromine derivatives</u> Bromination and specialty organobromides remain a niche industry as:
 - a) Handling bromine is difficult owing to its corrosive nature, thus provide an entry barrier.
 Bromination requires high degree of technical skills and expertise as it involves handling hazardous chemicals;
 - b) Maintaining consistent quality remains paramount given that its products find use in regulated industries. This plays a key role in maintaining sticky customer relationships. Around 50% of Neogen's business accrues from customers with relationships spanning over a decade, while 75% revenue is from those who have been purchasing from it for more than 5 years. Exhibit 21 shows Neogen's marquee set of customers.

Exhibit 21: Neogen's key customers in the Organic Chemical segment





















Source: Company

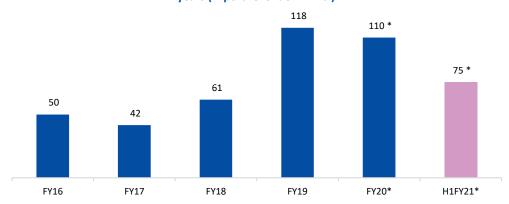
- c) Opportunity size of each specialty bromine derivative molecule, which players like Neogen manufacture, are relatively small compared to larger scale uses of bromines, thus making it unappealing from a capital employment point of view for manufacturers of bromine or bulk bromine derivatives. However, overall opportunity size remains large given a large bouquet of products.
- Focus on R&D Neogen has focussed on R&D from the start, with the function being led by Chairman and Managing Director Mr. Haridas Kanani. Promoters are technocrats (Managing Directors Mr. Haridas Kanani and Dr. Harin Kanani are both alumni of IIT Bombay) have a strong technical background. Its R&D department commenced operations in December 2001. Neogen also has an experienced individual Mr. Anurag Surana (ex-PI Industries) on board, who is driving the company's R&D agenda.

Neogen currently has two R&D facilities, one each in Vadodara and Mahape, with $^{\sim}10\%$ of the company's manpower dedicated to R&D. The management has highlighted that almost 90% of R&D spends are focused on the organic chemicals segment.

Investment Hypothesis

• <u>Relationship with global customers</u> – As seen in Exhibit 22, Neogen is export focused, with 35-50% of its revenue accruing from exports over FY16-20. Neogen exports to ~27 countries, with its key markets being the US, Europe and Japan.

Exhibit 22: Neogen's export business has increased substantially over the years (Export revenue - INR cr)



Note: Neogen's Organic Chemical business comprise most of export revenue as Inorganic business is largely domestic. *Exports were impacted by lockdown in Q4FY20 and Q1FY21. Source: Company, Edelweiss Professional Investor Research

We expect Neogen's export trajectory to improve FY21 and onwards as management pursue overseas customers in the two segments as we discuss in below exhibit.

Exhibit 23: Neogen's export strategy

Segment	Strategy
Organic Chemicals	 Innovator customers in the CSM segment are largely based out of Europe and Japan These customers are increasingly looking to outsource and India is a preffered destination As CSM business and Advanced Intermediates business grows, Neogen's share of revenue from exports should go up
Inorganic Chemicals	Current effort is to be second vendor for OEM's in the refrigeration space in Japan, China and Korea

V. Growth has been backed up by timely capacity expansions

a. Strong demand helps track Neogen's utilization of new capex

As we highlight in Exhibit 24, it is evident that the *slack in the growth rate in this segment during prior periods has more to do with capacity constraints than demand, which has been quite robust.* Management has been able to quickly utilize available capacities in the past. Neogen has seen strong growth and been *able to increase its turnover in this segment by almost 4x over FY17-20 to INR 249 crore, aided by available capacity post the acquisition of the Vadodara facility.*

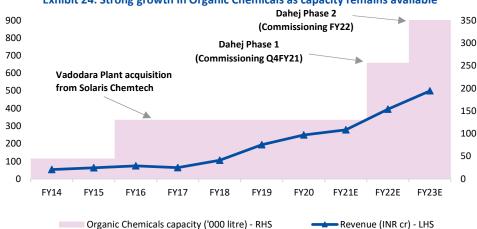


Exhibit 24: Strong growth in Organic Chemicals as capacity remains available

Source: Company, Edelweiss Professional Investor Research

The management is in the process of augmenting capacity. While this was earlier planned at their Vadodara site, *Neogen is now undertaking construction at its Dahej site* (which would bring in some tax advantages as it is located in a SEZ). Its organic chemicals business is significantly export oriented, particularly future focus areas of advanced intermediates and custom synthesis.

The management is trying to time the commissioning of this facility with receipt of approvals. Initial commercial trials of the products to be manufactured will be available with Neogen by the time Dahej is ready, to start the larger scale commercial production. Commissioning of first phase is expected to happen in Q4FY21.

Additionally, management has announced capex of INR 55 cr for the second phase of Dahej capacity augmentation. This is being undertaken because a large part of the first phase capacity will get consumed in manufacturing of products under the two recently inked long-term contracts. Neogen would hence require additional capacity by FY22.

Exhibit 25: Dahej greenfield capacity expansion details

Phase	Capex (INR cr)	Revenue Potential (INR cr)	Commissioning timeline	Optimal Utilization
1	70	150-175	Q4FY21	2 years
2	55	150-175	FY22	2 years

Investment Hypothesis

Dahej plant, in its first two phases, will add aggregate revenue of INR 300-350 cr, as optimal utilization gets achieved by FY24, with further capex decisions to be taken by Q3-Q4FY22. Neogen has enough land across Dahej and Vadodara for doing INR 1,000 cr business in each site, as per management. For example, Dahej has land and clearances for setting up four more multi-product plants, which should be sufficient to meet growth over the next few years. In Vadodara, Neogen has permission for additional volume of 1,500-2,000 MT, which again would take care of 5-7 years of growth.

b. Tailor-made facility to provide flexibility to operations

The Dahej organic facility will house a multi-product plant for manufacturing organobromide derivatives and advanced intermediates. The capacities being created factor in Neogen's pipeline of products and export enquiries from Japan and Europe.

Dahej being a tailor-made plant would provide Neogen much better flexibility as compared to its older facility at Mahape or the acquired plant in Vadodara. This should usher in additional efficiencies in terms of process and working capital management.

c. Organic Chemicals segment to clock strong growth over FY20-23E

We expect Neogen to clock 26% revenue CAGR from the organic chemical segment over FY20-23E. Growth would have been higher without the current capacity constraints as its present facilities operate at optimum utilisation.

As new facilities for organic chemicals get commissioned in Q4FY21, we expect growth to pick up significantly over FY22-23E, aided by robust demand and ramp-up of available capacity.

499 396 278 249 193 106 73 63 FY16 FY17 FY18 FY19 FY20 FY21E FY22E FY23E

Exhibit 26: Organic Chemicals segment likely to witness 26% CAGR in revenue over FY20-23E

Investment Hypothesis

VI. Inorganic Chemicals to grow at high single digits

In the inorganic chemicals segment, Neogen manufactures lithium-based chemicals that find enduse in the HVAC industry, besides application in pharma, specialty polymers and construction chemicals. Neogen manufactures around 10 lithium derivatives, of which lithium bromide is its key product. This segment contributes ~20% of revenue. The business is seasonal in nature due to exposure to the HVAC industry, where demand is higher in the last quarter of the fiscal due to depreciation benefits.

Lithium bromide is used in the refrigeration industry, where major original equipment manufacturers (OEMs) like Thermax, Voltas, and Kirloskar are its customers. The management is putting in all effort to be the second supplier to other OEMs in Japan, China and Korea. Other geographies to which Neogen exports its lithium derivatives are Europe, Middle East and the US.

The inorganic chemicals segment is enjoying some tailwinds off late. Use of the product in anti-viral (anti-HIV) drugs has increased off late due to the COVID-19 pandemic. Increasing capacity by customers in the engineering space and its success with overseas customers, along with approvals for its products from Dahej, will be the key growth drivers for the inorganic chemicals segment.

However, the limited set of customers and products in this segment implies that growth will be largely tracking growth in the HVAC segment. Neogen plans to ramp up its recently commissioned capacity (in Q4FY20) over the next 3-4 years. Factoring this, we expect Neogen to be optimally utilising the new facility by FY24E, implying around 8% CAGR over FY20-23E (refer Exhibit 27).

Growth will be a factor of volume growth and realisations. While we expect Neogen's volume growth in this segment to clock around 12% CAGR over FY20-23E, weakening of lithium prices would have some impact on revenue growth. Lithium prices have softened off late (Exhibit 35).

FY16 FY17 FY18 FY19 FY20 FY21E FY22E FY23E

Exhibit 27: Inorganic Chemicals revenue to increase by 8% CAGR over FY20-23E

VII. Revenue growth to be robust as Organic Chemicals capacity ramps-up

Neogen has seen consistent revenue growth over the last few years, with FY18-20 witnessing a high growth phase wherein its top line almost doubled (refer Exhibit 29). Revenue growth has been equally strong in both organic and inorganic chemicals as seen in Exhibit 28. While growth was partly constrained in FY20 and FY21 due to peak capacity utilisation (more so in the Organic Chemicals segment) and COVID-19 related lockdowns (which led to demand contraction in the Inorganic Chemicals segment), we expect it to resume strongly from FY22E onwards as organic capacity gets commissioned.

Over FY20-23E, we expect Organic Chemical and Inorganic Chemical segment revenues to grow by 26% and 8% CAGR, respectively, as highlighted previously. Consequently, we expect headline revenue to grow by 23% CAGR over FY20-23E.

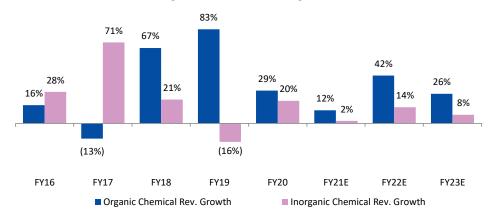


Exhibit 28: Robust growth visible in both segments for FY22 and FY23

Source: Company, Edelweiss Professional Investor Research

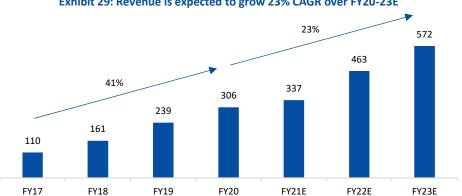


Exhibit 29: Revenue is expected to grow 23% CAGR over FY20-23E

VIII. Higher share of value added products to aid margin expansion

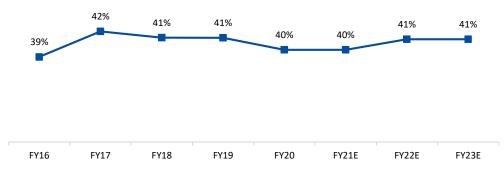
a. Stable gross margin denotes its ability to pass-on raw material volatility

Neogen's gross margin has been stable over FY16-20, staying in the range of 39-42% as shown in Exhibit 30. Longer-duration contracts while raw material sourcing and ability to pass on any volatility in raw material pricing has aided this stability, which we also expect to continue and improve as product mix increases towards higher value-added products.

The company primarily has 4 types of raw materials: a) Bromine; b) Lithium; c) Organic raw materials; and d) Inorganic acids, as we highlight in Exhibit 31.

The company's dependence on China as a raw material source is minimum, with alternatives available for most products.

Exhibit 30: Gross margin to stabilize in line with current operating levels



Source: Company, Edelweiss Professional Investor Research

Exhibit 31: Details of Neogen's raw material procurement arrangements

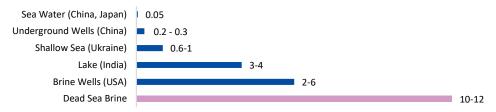
Raw material	Form	Supplier	Contracts	Others
Bromine	Liquid Bromine or Hydrobromic acid	Domestic and International Manufacturers	Suppliers: Annual contracts Customers: Formula linked contracts	Maintains some inventory to avoid supply side disruption
Lithium	Lithium carbonate and lithium hydroxide	Imported from Chile and Argentina	Suppliers: Earlier used to do annual contracts, but with weakening lithium prices has moved to quarterly contracts Customers: Formula linked contracts	Maintains some inventory to avoid supply side disruption
Others	Organic raw materials (petro chemicals, solvents, organic acids, alcohols aromatic compounds) and inorganic acids	Domestic and International manufacturers	-	-

Investment Hypothesis

b. Global Bromine mining landscape: Chinese capacities have reduced

As outlined in USGS Minerals Yearbook, Bromine is found principally in seawater, evaporitic (salt) lakes, and underground brines associated with petroleum deposits. The Dead Sea, in the Middle East, is estimated to contain 1bn MT of bromine. Seawater contains about 65 parts per million of bromine, or an estimated 100trn MT. Bromine is also recovered from seawater as a coproduct during evaporation to produce salt.

Exhibit 32: Bromine concentration by source (in g/l)



Source: ICL

Israel and Jordan are the largest sources of bromine globally due to their proximity to the Red Sea. Other leading producers are United States, China and Japan. In India, Rann of Kutch is a source of bromine. We highlight countries with leading reserves of Bromine in Exhibit 33 and 34. India's bromine production was estimated to be around 50,000 TPA of liquid bromine in 2019.

Exhibit 33: Bromine estimated world reserve by country (in MT)

Country	Reserves
United States	11,000,000
Azerbaijan	3,00,000
Israel	Large
Jordan	Large

Note: China and Japan have not been included in table as reserve data is not available.

Source: USGS Minerals Yearbook, Edelweiss Professional Investor Research

China's capacity has reduced in 2018 and 2019 as many bromine facilities in the Shangdong Province, particularly small-scale ones, remains closed for not being able to meet new environmental regulations. *This has led to higher prices of Bromine*. However, in the face of growing demand, Jordan is expanding production capacity.

Exhibit 34: Bromine world production contribution by country



Source: Satyesh Brinechem

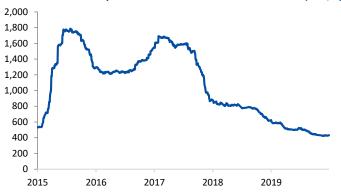
Investment Hypothesis

c. Global Lithium mining landscape: Capacity on a downcycle as lithium prices soften

Lithium is generally mined from two form of minerals – Lithium Carbonate and Lithium Hydroxide. Traditionally, lithium carbonate has been sourced from Brines (concentrated salt water with high lithium content – $^{\sim}60\%$ of global capacity in 2017), and lithium hydroxide from hard rock spodumene ($^{\sim}40\%$ of global capacity in 2017).

Chile and Argentina (which has ~45% global reserves) primarily have brine based sources, while Australia (which has ~40% global reserves) are spodumine based. 2017 saw rapid increase in production capacity in Australia where ~4x spodumene was produced and shipped to China for processing. With large increase in capacity, 2017 marked the peak of lithium price cycle (Exhibit 35).

Exhibit 35: Lithium prices have softened in recent times (INR/kg)



Note: China lithium carbonate prices; Source: Bloomberg

Exhibit 36: Lithium world reserves (in MT)

Country	Reserves
Australia	6,28,00,000
Chile	86,00,000
Argentina	17,00,000
Other	11,00,000
China	10,00,000
United States	6,30,000
Canada	3,70,000
Zimbabwe	2,30,000
Brazil	95,000
Portugal	60,000
World	1,70,00,000

Source: USGS Minerals Yearbook

Lithium prices have been on a downtrend as demand was lower than anticipation

While global consumption of lithium has increased in double digits in 2019, it was lower than anticipated by the lithium industry. This was due to (a) scale-back of the electric vehicle (EV) subsidy in China; leading to (b) lower EV sales volumes; and (c) consequent reduction in inventories.

This led to reduction in global production (Exhibit 37 highlights that Australia, a leading source saw substantial reduction in mine production), and a moderation in spot prices. This trend could continue for some time as excess capacity gets used.

Exhibit 37: Lithium world mine production by country (in MT)

	The second se			
	2016	2017	2018	2019
Argentina	5,800	5,700	6,400	6,400
Australia	14,000	40,000	58,800	42,000
Brazil	200	200	300	300
Canada	-	-	2,400	200
Chile	14,300	14,200	17,000	18,000
China	2,300	6,800	7,100	7,500
Portugal	400	800	800	1,200
Zimbabwe	1,000	800	1,600	1,600

Note: United States has not been included in table as production data is not available.

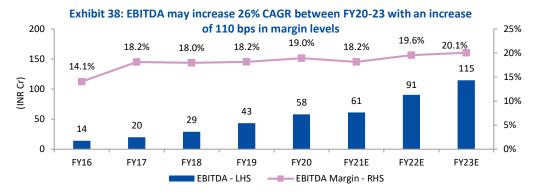
Source: USGS Minerals Yearbook, Edelweiss Professional Investor Research

Investment Hypothesis

d. Margin expansion to reflect value addition

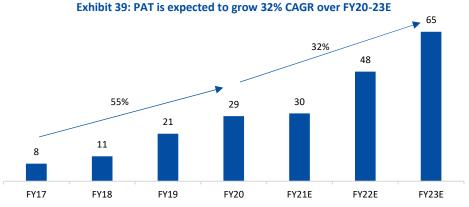
With new organic capacity in place, the management plans to focus on complex products, where there is scope to innovate, which would result in higher value addition to the molecules. We see the possibility of custom synthesis and contract research and manufacturing systems (CRAMS) business developing strongly from FY22 onwards.

As a result of this change in product mix towards higher value-added products, we expect Neogen's margin profile to improve over FY22-23E. As shown in Exhibit 38, the company has steadily improved its EBITDA margin to ~19% in FY20 from ~14% in FY16. We factor in further expansion from FY20 levels over the next 3 years. The management has historically guided EBITDA margin in the 17.5-19.5% range, while sharing the aspiration to cross 20% levels in the future, which we think can be achieved by FY23E, as Dahej plant with modern technologies also brings in higher efficiencies.



Source: Company, Edelweiss Professional Investor Research

As Neogen's Dahej capacity ramps-up, we expect fixed cost absorption to further aid bottom-line profitability. Additionally, Dahej being a SEZ, Neogen will enjoy tax advantages on their export income. We expect these factors to help PAT compound at 32% CAGR between FY20-23E.



Investment Hypothesis

IX. Focus on strengthening Balance Sheet to improve cash generation

a. Management intends to keep debt levels under 1x equity over the medium term

To fund acquisition and develop the Vadodara facility, debt in Neogen's books increased over FY16-19. Working capital intensive operations had resulted in an increase in WC-related debt as the company experienced rapid growth (3x revenue surge between FY16 and FY19).

While previous debt (INR 22 crore of term loans and INR 12 crore of preference shares) has been repaid from proceeds of the initial public offering (IPO), we expect its debt profile to remain elevated yet under control as the company continues to witness strong growth. We expect peak debt to be around INR 200 crore, which would take Neogen's debt-to-equity ratio to around 1x in FY22E, with a peak level of 1.2x as guided by the management.

1.6 1.6 1.7 0.9 0.9 0.9 0.6 FY16 FY17 FY18 FY19 FY20 FY21E FY22E FY23E

Exhibit 40: Net debt-to-equity ratio to improve going forward

Source: Company, Edelweiss Professional Investor Research

Expect improvement in working capital

Neogen's inventory days have been historically elongated on account of the nature of business. We highlight below the key reasons for the same.

- Raw material inventory management Neogen holds a few weeks inventory for its key raw material to avoid any supply-side challenges and to meet customer commitments. This was evident in the recent lockdown where operations of the in-demand pharma/agrointermediates in the organic chemicals business remained largely unaffected.
- **Lithium sourcing** Lithium is sourced from Chile and Argentina, where the transit time adds to the WC cycle.
- **Finished goods inventory management** The company maintains some product inventory in a semi-finished state for final blending.
- Changeovers in reactors Fungible plants however add to the WC cycle as change in product involves a cleaning process.

Investment Hypothesis

Neogen's management intends to move closer to the industry standard of 90-100 days WC cycle.

Exhibit 41: Various levers management is pressing to improve WC days

Lever	Details
Inventories	 Dedicated reactors for larger molecules at the new facility will reduce changeover time (revenue contribution from larger molecules have increased over time, with 7-8 molecules contributing in excess of INR 10 crore). Better visibility from international customers will help in demand forecasting which would aid in better planning of capacity usage.
Debtors	 Longer term contracts with customers will provide better visibility. Better payment terms when negotiating new contracts, which is expected to ease debtor days.
Creditors	 Receiving longer credit term with key vendors Creditors are also getting bill discounted by bankers and hence are willing to the longe credit terms

Source: Company, Edelweiss Professional Investor Research

While FY20 WC cycle was stretched due to COVID-19 related circumstances, we expect the company to gradually reduce the WC cycle to its previous range of 135-140 days and lower. As shown in Exhibit 42, we have conservatively factored WC cycle to improve to 145 days over FY20-23E. This will help Neogen in generating cash from operations as highlighted in Exhibit 43.

Exhibit 42: Working capital cycle to improve going forward (in days)

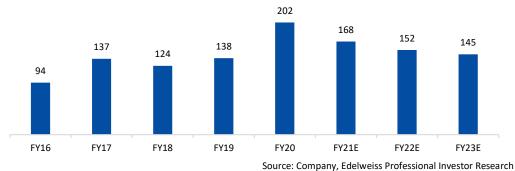
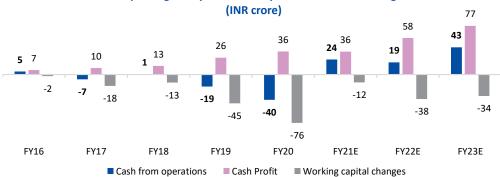
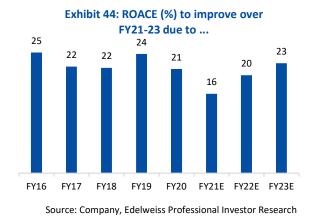


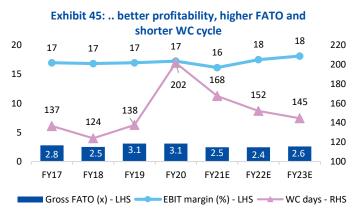
Exhibit 43: Improving WC cycle and cash profits to aid cash flow generation



Investment Hypothesis

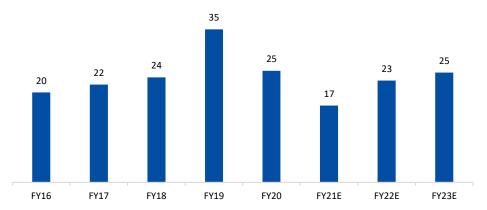
c. ROAE and ROACE to improve with higher profitability, higher utilization and shorter WC cycle We expect Neogen's ROAE and ROACE to improve over FY21-23. The key underlying driver is improvement of profitability (110/213 bps improvement in EBITDA margin/PAT margin over FY20-23E) and ramp-up in utilization that would help in improving asset turnovers. Furthermore, better leverage ratio and a reduction in working capital cycle would help record improvement ROAE and ROACE respectively over FY21-23. We illustrate this in Exhibit 44, 45, and 46.





Source: Company, Edelweiss Professional Investor Research

Exhibit 46: ROAE (%) to improve over FY21-23E



Outlook and Valuation

X. Initiate coverage with a BUY recommendation

Neogen's share price has had a robust run and has returned ~140% since its listing in May 2019. Post listing, over the last six quarters, the company has demonstrated its strength in incremental business wins, R&D capabilities and transitioning towards the advance intermediates and CSM segments.

Owing to the consistent delivery, we remain positive on Neogen, and believe that it can evolve into a strong CSM player over a longer time horizon. Hence, in Exhibit 47, we compare Neogen's few parameters (related to valuation, growth, profitability and balance sheet) with established specialty chemicals players, including players like Navin Fluorine International and PI Industries, who run successful CRAMS/CSM businesses which are significant contributors to their earnings.

Exhibit 47: Comparison of valuation parameters of Neogen and listed chemical stocks

							_	1			1		
Company	Rating	Market Cap (INR cr)	FY22 P/E (x)	FY23 P/E (x)	FY22 EV/EBITDA (x)	FY23 EV/EBITDA (x)	PEG (x)	Revenue FY20-23E CAGR (%)	PAT FY20-23E CAGR (%)	FY22 EBITDA Margin (%)	FY23 EBITDA Margin (%)	FY22 ROE (%)	FY20 Net D/E
					Peer	set							
Aarti Industries	Not Rated	19,394	27.8	21.5	16.5	13.5	1.9	18.0	18.9	23.4	23.5	18.5	0.7
Fine Organics	Not Rated	7,651	36.3	29.4	24.3	20.5	2.8	15.6	16.5	22.1	22.7	25.5	-0.2
Galaxy Surfactants	Not Rated	6,764	22.4	19.6	14.6	12.9	2.0	11.1	14.4	15.1	15.2	21.5	0.3
Navin Fluorine	BUY	12,976	44.1	29.8	31.4	21.0	2.2	26.1	30.9	28.2	29.1	16.3	-0.2
PI Industries	Not Rated	33,718	34.8	29.1	25.4	21.1	2.3	24.5	32.2	23.6	23.6	16.6	0.1
Rossari Biotech	BUY	4,206	40.0	29.9	25.4	19.7	2.2	22.4	29.1	18.8	19.3	25.0	-0.2
SRF	BUY	29,968	23.1	20.2	14.8	12.9	2.2	13.9	13.4	23.8	23.9	19.8	0.8
Vinati Organics	Not Rated	12,066	32.5	25.0	23.7	18.1	2.8	19.3	13.1	37.1	37.4	22.7	-0.2
Neogen	BUY	1,467	30.6	22.4	18.4	14.3	1.6	23.2	31.9	19.6	20.1	23.0	0.9
Average	-	-	32.6	25.6	22.0	17.5	2.3	-	-	-	-	-	-
CRAMS focused avg	-	-	39.5	29.4	28.4	21.0	2.2	-	-	-	-	-	-

Note: CRAMS focused peers are highlighted. Source: Bloomberg consensus, Edelweiss Professional Investor Research

As we can observe from Exhibit 47, on a PEG basis, Neogen's listed peers are trading at an average multiple of 2.3x, while CRAMS-focused peers are trading at a PEG multiple of 2.2x. Compared to the peer-set, despite higher FY20-23E growth expectation in most cases, Neogen is trading at a PEG multiple of 1.6x.

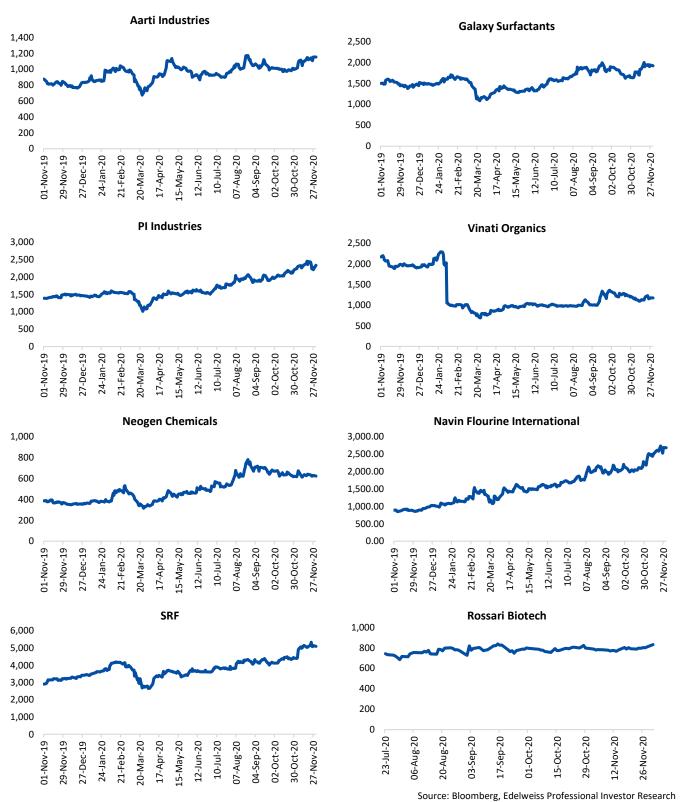
We initiate coverage on Neogen Chemicals Ltd with a BUY recommendation and a target price of INR 758 (resulting in an upside of 22%), valuing the company at 27x its FY23E earnings. The multiple has been arrived at factoring in the growth potential of the company, while also keeping in mind the risks that emanate from a leveraged balance sheet and a long working capital cycle. At this target price, the PEG multiple for Neogen would be at 1.9x, which is still at discount to peer set average and CRAMS/CSM focused players.

Outlook and Valuation

Risks to our investment thesis:

- Stretched working capital cycle The company has a long working capital cycle which the management has focused on shortening to comparable levels of peers. The reduction in the working capital cycle remain a key parameter for future operating cash generation and would play a key role in improving balance sheet strength. On the other hand, if this does not transpire, it could impact risk perception of the company and impact market valuations.
- 2. Delay in ramp up of new capacities Neogen's greenfield capexes in the Organic Chemical segment are expected to see optimal utilization in the next 2-3 years, driven by strong demand and inking of long-term contracts. Any delay related to the ramp-up would result in lowering of earnings expectations and could impact market multiples, which factor in strong growth in earnings.

Exhibit 48: 1-year stock price performance chemical companies



Management Profile

Exhibit 49: Management team at Neogen Chemicals Ltd.

Name	Designation	Profile
Haridas Thakarshi Kanani	CMD	As Chairman and Managing Director of the company, Mr. Haridas Kanani, looks after manufacturing, research and development, general operations and management of various manufacturing units. After working with Excel Industries and setting up Chem Ocean Industries, India's first indigenous Bromine plant at Navalakhi, Gujarat, he started Chem Ocean Consultant, providing consultancy, engineering technologies to set up Bromine plants. In 1985, he founded Prachi Chemicals, to manufacture organic and inorganic bromides, which was later, in 1989, was incorporated as Neogen Chemical Ltd. He holds bachelor's degree in chemical engineering, from IIT, Mumbai.
Dr. Harin Haridas Kanani	Joint MD	Dr. Harin Kanani, oversees various business divisions such as research and development, business development, quality control, purchase, marketing and finance. He is bachelor of chemical engineering from IIT, Mumbai and also holds master's degree and a doctorate in chemical engineering from the University of Maryland. After working with companies like Asian Paints India Limited and Pioneer Hi-Bred International Inc. in the United States, he joined Neogen Chemicals Ltd in 2008 as a general manager and took over as Joint MD in 2017.
Ketan Vyas	CFO CFO	Mr. Ketan Vyas, has been recently appointed as CFO in October 2020. Earlier, he worked as a Group CFO at Batliboi Ltd. and was previously associated with companies like Arcelor Mittal Projects India Pvt. Ltd., SGS India Pvt. Ltd., Dow Corning India Pvt. Ltd., Rhodia Chemicals India Pvt. Ltd. and Amplas Polymers Pvt. Ltd. He has gathered expertise in Strategic Planning, Budgeting & Cost Control, Financial Reporting & Management, System Integration and Solution Design during his 22 years of experience. He is a member of ICAI and completed Masters in Business Administration.
Shyamsunder Upadhyay	ED (Operations)	Executive Director, Mr. Shyamsunder Upadhyay, oversees maintenance, projects, logistics, administration and engineering store of the company. During his tenure of 41 years in the industry, he worked at various companies such as Savita Chemicals, Wimco, Gharda Chemicals, Clariant India, Tytan Organics Limited, Arch Pharmalabs Limited and Laxmi Organic Industries Limited. He holds a master's degree in science from Vikram University, Ujjain.

Financials

Income statement (INR Cr)

Year to March	FY19	FY20	FY21E	FY22E	FY23E
Income from operations	239	306	337	463	572
Total operating expenses	196	248	276	372	457
EBITDA	43	58	61	91	115
Depreciation and amortisation	3	5	7	10	11
EBIT	41	53	54	81	104
Interest expenses	12	12	15	20	20
Profit before tax	29	41	40	62	84
Provision for tax	8	12	10	14	18
Core profit	21	29	30	48	65
Extraordinary items	0	0	0	0	0
Profit after tax	21	29	30	48	65
Adjusted net profit	21	29	30	48	65
EPS (INR) basic	10.5	12.3	12.7	20.6	28.1
Diluted shares (Cr)	2.0	2.3	2.3	2.3	2.3
EPS (INR) fully diluted	10.5	12.3	12.7	20.6	28.1

Common size metrics as a % of net revenue

Year to March	FY19	FY20	FY21E	FY22E	FY23E
Operating expenses	81.8	81.0	81.8	80.4	79.9
Depreciation	1.2	1.7	2.0	2.1	1.9
Interest expenditure	5.0	3.9	4.4	4.2	3.5
EBITDA margins	18.2	19.0	18.2	19.6	20.1
Net profit margins	8.8	9.4	8.8	10.4	11.5

Growth metrics (%)

Year to March	FY20	FY21E	FY22E	FY23E
Revenues	28.1	10.1	37.4	23.5
EBITDA	33.7	5.5	47.9	26.7
PBT	40.6	(3.3)	55.2	36.4
Net profit	36.8	3.5	61.8	36.4
Earnings per share	17.5	3.5	61.8	36.4



Financials

Year to March	FY19	FY20	FY21E	FY22E	FY23E
Equity share capital	20	23	23	23	23
Reserves & surplus	50	133	162	209	272
Shareholders' funds	70	156	185	232	296
Total Debt	120	137	175	199	178
Deferred Tax Liabilities (net)	5	6	7	7	7
Minority interest	0	0	0	0	0
Sources of funds	195	299	368	438	481
Gross block	88	113	163	218	228
Depreciation	(5)	(9)	(15)	(25)	(36)
Net block	83	104	147	193	191
Capital work in progress	0	3	20	5	10
Total fixed assets	83	107	167	198	201
Other Non Current Assets	0	0	0	0	0
Investments	1	1	0	0	0
Inventories	72	130	136	170	206
Sundry debtors	61	75	80	108	125
Cash and equivalents	2	1	2	4	9
Loans and advances	0	0	0	0	0
Other current assets	25	24	45	45	45
Total current assets	160	231	264	327	386
Sundry creditors and others	43	36	62	85	105
Provisions and other current liabilities	5	7	1	1	1
Total CL & provisions	47	43	63	86	106
Net current assets	112	188	201	241	280
Misc expenditure	(1)	(3)	(1)	(1)	(1)
Uses of funds	195	299	368	438	481
Book value per share (INR)	35	67	79	99	127

Cash flow statement

Year to March	FY19	FY20	FY21E	FY22E	FY23E
Net profit	21	29	30	48	65
Add: Depreciation	3	5	7	10	11
Add: Misc expenses written off	2	2	(2)	0	0
Add: Deferred tax	1	1	1	0	0
Gross cash flow	26	36	36	58	77
Less: Changes in W. C.	45	76	12	38	34
Operating cash flow	(19)	(40)	24	19	43
Less: Capex	18	29	67	40	15
Free cash flow	(36)	(69)	(44)	(21)	28

Financials

-				
υ	3	tı	n	١c
11	а	u	u	ю

Year to March	FY19	FY20	FY21E	FY22E	FY23E
ROAE (%)	35	25	17	23	25
ROACE (%)	24	21	16	20	23
Debtors (days)	93	90	87	85	80
Debt/Equity	1.7	0.9	0.9	0.9	0.6
Inventory (days)	111	155	147	134	132
Payable (days)	65	43	67	67	67
Cash conversion cycle (days)	138	202	168	152	145
Debt/EBITDA	2.8	2.4	2.9	2.2	1.6
Adjusted debt/Equity	1.7	0.9	0.9	0.9	0.6

Valuation parameters

variation parameters					
Year to March	FY19	FY20	FY21E	FY22E	FY23E
Diluted EPS (INR)	10.5	12.3	12.7	20.6	28.1
Y-o-Y growth (%)		17.5	3.5	61.8	36.4
Diluted P/E (x)	59.6	50.8	49.1	30.3	22.2
Price/BV(x)	17.8	9.3	7.8	6.3	4.9
EV/Sales (x)	5.7	5.2	4.8	3.6	2.8
EV/EBITDA (x)	31.5	27.4	26.6	18.2	14.2
Basic EPS	10.5	12.3	12.7	20.6	28.1
Basic PE (x)	59.6	50.8	49.1	30.3	22.2

Edelweiss Broking Limited, Edelweiss House, Off, CST Road, Kolivery Village, MMRDA Area, Kalina, Santacruz East, Mumbai, Maharashtra 400098

Vinay Khattar		
Head Research		
vinay khattar@edelweissfin.com		

VINAY KHATTAR Digitally signed by VINAY KHATTAR
DN: c=IN, o=Personal, postalCode=400072,
st=MARARASHTRA,
sternare=cd5737057831c416d2a577064cb693
183887e7f342c50bd877c00c00c2e82a1,
cc=VINAY KHATTAR
Date: 2020,12.02 12:57.05 +0530'

Rating	Expected to
BUY	appreciate more than 15% over a 12-month period
HOLD	appreciate between 5% and 15% over a 12-month period
REDUCE	return below 5% over a 12-month period



Disclaimer

Edelweiss Broking Limited ("EBL" or "Research Entity") is regulated by the Securities and Exchange Board of India ("SEBI") and is licensed to carry on the business of broking, depository services and related activities. The business of EBL and its Associates (list available on www.edelweissfin.com) are organized around five broad business groups – Credit iNeogenuding Housing and SME Finance, Commodities, Financial Markets, Asset Management and Life Insurance.

Broking services offered by Edelweiss Broking Limited under SEBI Registration No.: INZ000005231; Name of the Compliance Officer: Mr. Brijmohan Bohra, Email ID: complianceofficer.ebl@edelweissfin.com Corporate Office: Edelweiss House, Off CST Road, Kalina, Mumbai - 400098; Tel. 18001023335/022-42722200/022-40094279

This Report has been prepared by Edelweiss Broking Limited in the capacity of a Research Analyst having SEBI Registration No.INH000000172 and distributed as per SEBI (Research Analysts) Regulations 2014. This report does not constitute an offer or solicitation for the purchase or sale of any financial instrument or as an official confirmation of any transaction. The information contained herein is from publicly available data or other sources believed to be reliable. This report is provided for assistance only and is not intended to be and must not alone be taken as the basis for an investment decision. The user assumes the entire risk of any use made of this information. Each recipient of this report should make such investigation as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (iNeogenuding the merits and risks involved), and should consult his own advisors to determine the merits and risks of such investment. The investment discussed or views expressed may not be suitable for all investors.

This information is strictly confidential and is being furnished to you solely for your information. This information should not be reproduced or redistributed or passed on directly or indirectly in any form to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject EBL and associates / group companies to any registration or licensing requirements within such jurisdiction. The distribution of this report in certain jurisdictions may be restricted by law, and persons in whose possession this report comes, should observe, any such restrictions. The information given in this report is as of the date of this report and there can be no assurance that future results or events will be consistent with this information. This information is subject to change without any prior notice. EBL reserves the right to make modifications and alterations to this statement as may be required from time to time. EBL or any of its associates / group companies shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. EBL is committed to providing independent and transparent recommendation to its clients. Neither EBL nor any of its associates, group companies, directors, employees, agents or representatives shall be liable for any damages whether direct, indirect, special or consequential iNeogenuding loss of revenue or lost profits that may arise from or in connection with the use of the information. Our proprietary trading and investment businesses may make investment decisions that are inconsistent with the recommendations expressed herein. Past performance is not necessarily a guide to future performance. The

EBL shall not be liable for any delay or any other interruption which may occur in presenting the data due to any reason i Neogenuding network (Internet) reasons or snags in the system, break down of the system or any other equipment, server breakdown, maintenance shutdown, breakdown of communication services or inability of the EBL to present the data. In no event shall EBL be liable for any damages, iNeogenuding without limitation direct or indirect, special, incidental, or consequential damages, losses or expenses arising in connection with the data presented by the EBL through this report.

We offer our research services to clients as well as our prospects. Though this report is disseminated to all the customers simultaneously, not all customers may receive this report at the same time. We will not treat recipients as customers by virtue of their receiving this report.

EBL and its associates, officer, directors, and employees, research analyst (iNeogenuding relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company(ies), mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company(ies) discussed herein or act as advisor or lender/borrower to such company(ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of research report or at the time of public appearance. EBL may have proprietary long/short position in the above mentioned scrip(s) and therefore should be considered as interested. The views provided herein are general in nature and do not consider risk appetite or investment objective of any particular investor; readers are requested to take independent professional advice before investing. This should not be construed as invitation or solicitation to do business with EBL.

EBL or its associates may have received compensation from the subject company in the past 12 months. EBL or its associates may have managed or co-managed public offering of securities for the subject company in the past 12 months. EBL or its associates may have received compensation for investment banking or merchant banking or brokerage services from the subject company in the past 12 months. EBL or its associates may have received any compensation for products or services other than investment banking or brokerage services from the subject company in the past 12 months. EBL or its associates have not received any compensation or other benefits from the Subject Company or third party in connection with the research report. Research naalyst or his/her relative or EBL's associates may have financial interest in the subject company. EBL, its associates, research analyst and his/her relative may have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of public appearance.

Participants in foreign exchange transactions may incur risks arising from several factors, iNeogenuding the following: (i) exchange rates can be volatile and are subject to large fluctuations; (ii) the value of currencies may be affected by numerous market factors, iNeogenuding world and national economic, political and regulatory events, events in equity and debt markets and changes in interest rates; and (iii) currencies may be subject to devaluation or government imposed exchange controls which could affect the value of the currency. Investors in securities such as ADRs and Currency Derivatives, whose values are affected by the currency of an underlying security, effectively assume currency risk.

Research analyst has served as an officer, director or employee of subject Company: No EBL has financial interest in the subject companies: No

EBL's Associates may have actual / beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of research report.

Research analyst or his/her relative has actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of research report: No

Disclaimer

EBL has actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of research report: No Subject company may have been client during twelve months preceding the date of distribution of the research report.

There were no instances of non-compliance by EBL on any matter related to the capital markets, resulting in significant and material disciplinary action during the last three years. A graph of daily closing prices of the securities is also available at www.nseindia.com

Analyst Certification:

The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

Additional Disclaimer for U.S. Persons

Edelweiss is not a registered broker – dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition Edelweiss is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by Edelweiss, iNeogenuding the products and services described herein are not available to or intended for U.S. persons.

This report does not constitute an offer or invitation to purchase or subscribe for any securities or solicitation of any investments or investment services and/or shall not be considered as an advertisement tool. "U.S. Persons" are generally defined as a natural person, residing in the United States or any entity organized or incorporated under the laws of the United States. US Citizens living abroad may also be deemed "US Persons" under certain rules.

Transactions in securities discussed in this research report should be effected through Edelweiss Financial Services Inc.

Additional Disclaimer for U.K. Persons

The contents of this research report have not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000 ("FSMA"). In the United Kingdom, this research report is being distributed only to and is directed only at (a) persons who have professional experience in matters relating to investments falling within Article 19(5) of the FSMA (Financial Promotion) Order 2005 (the "Order"); (b) persons falling within Article 49(2)(a) to (d) of the Order (iNeogenuding high net worth companies and unincorporated associations); and (c) any other persons to whom it may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons").

This research report must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this research report relates is available only to relevant persons and will be engaged in only with relevant persons. Any person who is not a relevant person should not act or rely on this research report or any of its contents. This research report must not be distributed, published, reproduced or disclosed (in whole or in part) by recipients to any other person.

Additional Disclaimer for Canadian Persons

Edelweiss is not a registered adviser or dealer under applicable Canadian securities laws nor has it obtained an exemption from the adviser and/or dealer registration requirements under such law. Accordingly, any brokerage and investment services provided by Edelweiss, iNeogenuding the products and services described herein, are not available to or intended for Canadian persons.

This research report and its respective contents do not constitute an offer or invitation to purchase or subscribe for any securities or solicitation of any investments or investment services.

Disclosures under the provisions of SEBI (Research Analysts) Regulations 2014 (Regulations)

Edelweiss Broking Limited ("EBL" or "Research Entity") is regulated by the Securities and Exchange Board of India ("SEBI") and is licensed to carry on the business of broking, depository services and related activities. The business of EBL and its associates are organized around five broad business groups — Credit ineogenuding Housing and SME Finance, Commodities, Financial Markets, Asset Management and Life Insurance. There were no instances of non-compliance by EBL on any matter related to the capital markets, resulting in significant and material disciplinary action during the last three years. This research report has been prepared and distributed by Edelweiss Broking Limited ("Edelweiss") in the capacity of a Research Analyst as per Regulation 22(1) of SEBI (Research Analysts) Regulations 2014 having SEBI Registration No.INH000000172