

Short note on Diamines & Chemicals Ltd 25/5/2022

Plot No 13 PCC Area Petrochemicals Vadodara Gujarat 391346.

Deals in:- Ethelene Diamine, Di – Ethylene Triamines, Tri – Ethylene Tetramine, Tetrathylene pentaamine, Penta ethylene hexamine, hexamethylene heptamine, polyethylene polyamines and other olefinic diamines such as polypropylene diamine, butyl diamine and other organic amines as well as chemicals products polymer compounds both organic and in organic derived from ethylene diamine and other tyles of ethylene amines.

About the Business

Incorporated in the year 1976 and commenced its production in 1982, Diamines & Chemicals Ltd. has been the [sole manufacturer of Ethyleneamines](#) for more than two decades. The company also has a Wind Turbine. The company is catering to a large cross-section of Indian manufacturing Industry spread across a wide spectrum of actual Users like Bulk Drugs (Quinolones, Antihistamines) to Fungicide – Insecticide, Polyamide resins, Gas Sweetening, Chelants, Textile Auxiliaries, Water Treatment Chemicals, Paints and Adhesives, Chemical Syntheses, Lube Oil Additives. It is one of the [dominant suppliers of PIPERAZINE ANHYDROUS and PIPERAZINE \(40% market share\)](#) to pharmaceutical and Gas Sweetening Application industries. [Indian Ethyleneamines market expected to grow at ~8% CAGR](#) in the next few years and piperazine likely to benefit from domestic pharma growth. Company is the key manufacturer of ethylene amines, which is a building block of many related industries, and has made it the market leader in its segment.

Market Cap	B V
300 Crores	Rs 102/-
ROCE	ROE
23.9%	18%
Promoter	E V
54.4%	260 Cr
PE 17.9	PB 3.01

Debottlenecking and raw material availability to drive short-term growth; execution is a key monitorable

Diamines' growth in the next two years will largely be production driven. We expect it to increase its non-piperazine ethyleneamines production from 1,150 to ~3,500 tonnes and that of piperazine by an incremental~350 tonnes. Key drivers: 1) debottlenecking of its plant that will increase its total production capacity, and 2) incremental raw material availability for piperazine. However, success of the scaled up operation through de-bottlenecking is a key monitorable.

(Source:- 2011 Crisil report)

Its geographical position is an added advantage. The company has augmented facility for Ethyleneamines homologues required for various users. Ethylene amines are particularly reactive molecules which have the ability to change the properties of a wide range of chemicals. The Products Ethylene Amines find their application in various industry segments such as Pharmaceuticals

Agro-chemicals, Resin and Coating, Water treatment chemicals, Oilfield chemicals and so many others. The plant facility is equipped with up to date manufacturing equipment and supported by R & D Centre and quality assurance department which are equipped with advanced equipment and analytical instruments. Ethylenediamine is an organic complex which is used chemical synthesis. Growing product application as chelating agents, bleach activators and corrosion inhibitors may boost industry size in forecast timeframe.

(INR Crores/10 Millions)	DIAMINES & CHEMICALS LTD										Mar-22
Narration	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Last 4 Quarters
Year Numbers	1	2	3	4	5	6	7	8	9	10	
Sales	57	44	39	36	35	39	47	69	63	66	66
Sales YoY%		-23.45%	-11.04%	-8.98%	-2.25%	10.72%	22.88%	46.45%	-9.35%	5.24%	-0.02%
Gross Profit	35.85	14.86	19.37	17.59	18.87	28.63	31.32	59.90	48.94	48.66	22
GP Margin	62%	34%	50%	49%	54%	74%	66%	86%	78%	74%	33%
Operating Profit	8	6	5	4	9	12	19	35	25	22	22
Operating Profit Margin (OPM%)	14%	13%	13%	13%	27%	30%	40%	51%	40%	33%	33%
Other Income	0.23	0.30	0.18	0.36	0.07	(1.08)	0.96	2.09	2.55	1.82	1.82
EBIT	6	4	3	3	7	9	14	35	26	22	22
EBIT Margin%	10.38%	8.58%	7.98%	7.95%	21.45%	22.23%	37.81%	50.88%	41.26%	33.58%	33.60%
EBIT YoY %		-36.74%	-17.24%	-9.29%	163.60%	14.75%	109.00%	97.09%	-26.49%	-14.35%	0.05%
Interest	4	3	3	3	2	0	0	0	0	0.09	0
Depreciation	2	2	2	2	2	2	2	2	2	2	2
Profit before tax (PBT)	2	1	(0)	0	6	8	18	35	26	22.11	22.12
PBT Margin(PBT%)	3.75%	1.80%	-0.74%	0.22%	16.47%	21.40%	37.66%	50.76%	41.13%	33.44%	33.46%
Tax	0.45	0.04	1.25	(0.17)	0.94	1.15	4.69	11.19	4.81	5.38	5.37
Tax%	21%	5%	-431%	-213%	16%	14%	26%	32%	19%	24%	24%
Net profit after tax (PAT)	1.70	0.75	-1.55	0.25	4.80	7.09	13.13	23.99	21.03	16.72	17
PAT YoY%		-55.88%	-306.67%	-116.13%	1820.00%	47.71%	85.19%	82.71%	-12.34%	-20.49%	0.00%
Net Profit Margin (NPM%)	3%	2%	-4%	1%	14%	18%	28%	35%	33%	25%	25%
Total Debt (D)	20	20	20	16	7	-	2	-	0	-	-

Financial Analysis:-

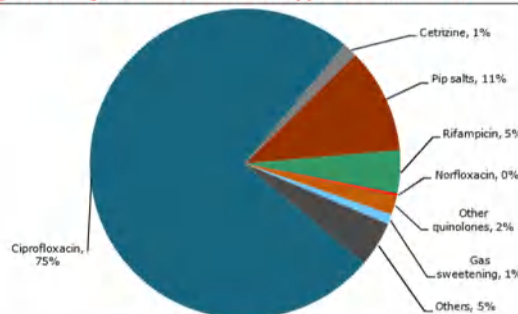
The management was able to increase the sales from 57 crores in 2013 to 66 crores in 2022. That's growth of hardly 2%. Sales had increased to 69 crores in 2020 then dropped to 66 crores in 2022. The company has had extreme high volatile operating margins. The operating margins have ranged from 13% in fy 2014, 2015, 2016 which saw a sudden jump to 27% in fy 17 going up to 51% in 2020 and again dropping to 33%. This operating margins trends shows that the management faces cyclical attributes towards the business and they are not quit able to pass on increasing cost of raw materials to their end customers. When prices of their raw material see subdued price trends the business gets to enjoy good margins and when the rm prices escalates the margins cool off.

Company also has to compete with competitors who are either forward or backward integrated & has the advantage of scale of economies & thus can swamp the markets with excess & lower priced or even duty free products.

The Ethylene amines business is going through demand-supply imbalance on global level and this is expected to continue in the year 2021-22 also. Your company is well aware of the challenging scenario lying ahead and taking necessary steps by planning activities properly at operational stages.

(Source:- Fy 21 AR Pg 53,54)

Figure 8: Major domestic end-use applications of PIP-A



Source: Company, CRISIL Research

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Cyclical attributes of Commodity Business

ETHYLENEDIAMINE AND ITS SALTS

HS Code - 29212100

Rates in Rs. / KGS



The results of the company will vary as per the cyclical trends of prices of the commodity it sells. The main reason for the jump up in sales in profits in 2019-20 was the hike in import prices of ethylamine.

Balance Sheet

Standalone Figures in Rs. Crores / [View Consolidated](#)

[CORPORATE ACTIONS](#)

	Mar 2011	Mar 2012	Mar 2013	Mar 2014	Mar 2015	Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022
Share Capital +	7	10	10	10	10	10	10	10	10	10	10	10
Reserves	25	24	25	25	24	24	28	33	39	55	75	90
Borrowings	28	26	20	20	20	16	7	0	2	0	0	0
Other Liabilities +	17	15	12	10	10	9	9	10	11	11	9	10
Total Liabilities	76	75	66	65	64	58	54	53	62	76	95	111
Fixed Assets +	31	34	33	32	29	27	25	24	24	20	22	38
CWIP	2	1	0	0	0	0	0	1	1	1	0	2
Investments	0	0	0	0	0	0	1	1	0	2	6	13
Other Assets +	43	39	32	34	34	30	27	27	36	53	66	58
Total Assets	76	75	66	65	64	58	54	53	62	76	95	111

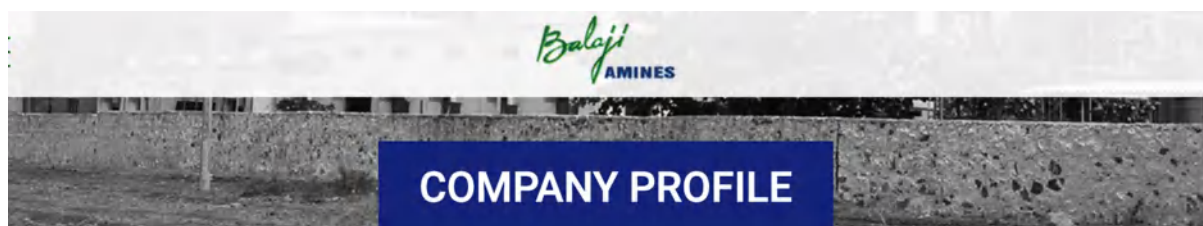
The company had applied to do a capex of 14.5 crores for PILOT Plant in Oct 2019 [here](#). Which they have commissioned and completed without any debt and from internal accruals. The rationale for this project was to have the necessary infrastructure relevant to product development and research.

Industry:-

Ethyleneamines market size was over USD 2 billion in 2017 and industry expects consumption of above 700 kilo tons by 2024. Ethyleneamines are commonly used in surfactants for their good foaming characteristics which is likely to propel product demand by 2024. Growing consumer awareness regarding cleanliness and hygiene has led to high demand in laundry and detergent products, thus promoting ethylene **amines market** size in surfactant application. Growing investments in research to develop novel products with improved properties to make them more eco-friendly supported by technological advancements will propel product demand. Ethyleneamines finds usage in production of personal care and home products. Ethylenediamine is used for production of tetraacetylenediamine, which is used as a bleach activator in pulverised detergent structures. These amines are also used for producing amphotoacetates, which are essential constituent in detergents including baby care products, shower gel and shampoo.

Product / service offering	Piperazine-Anhydrous (PIP-A), one of the saleable forms of piperazine.	Ethylenediamine (EDA) and higher ethyleneamines derivatives that mainly include: <ul style="list-style-type: none"> • Diethylenetetramine (DETA) • Triethylenetetramine (TETA) • Aminoethylpiperazine (AEP)
Geographic presence	Domestic consumption: 96% Exports: 4%	Domestic consumption: 93% Exports: 7%
Market position	<ul style="list-style-type: none"> • Only domestic player to produce PIP-A • Has 40% share of the domestic piperazine market. 	<ul style="list-style-type: none"> • One of the few global players to own ethyleneamines manufacturing process technology. • Only domestic player to produce ethyleneamines; has 8% share of the largely import-dependent domestic market.
Industry growth expectations	<ul style="list-style-type: none"> • High demand from various end-applications. • Constraints in current manufacturing process are limiting growth in global piperazine production. 	<ul style="list-style-type: none"> • Ethyleneamines demand is expected to grow at around 8% CAGR in the next few years. • Current demand is 29,200 tonnes, which is expected to increase to 38,000 tonnes by

Balaji Amines has entered into the space of Ethelene Amines with a capacity of 45000 TPA which is much larger than the company. This has caused their margins to revert back to mean and hence the company has seen a drop of margins and stagnation of topline.



Balaji Amines Ltd., INDIA, an ISO 9001: 2015 certified company, specialised in manufacturing Methylamines, Ethylamines, Derivatives of Specialty Chemicals and Pharma Excipients. These have been the main products, we also have facilities for the manufacture of derivatives, which are down stream products for various Pharma /Pesticide industries apart from user specific requirements.

EXIT of Alkyl Amines:-

23. Declassification / Reclassification of Promoters:-

During the previous year, Shareholders Agreement was executed between the two Promoter Groups of the Company viz., Mr. Amit Mehta Group and M/s Alkyl Amines Chemicals Limited jointly with Mr. Yogesh Kothari and M/s SYK Trading and Consulting LLP who have sold their shares as per the Agreement to Mr. Amit Mehta & Group. As per Shareholder's Agreement, Mr. Yogesh Kothari, Chairman and Mr. Kirat Patel, Non-Executive Director have resigned from the Board w.e.f. 19th November, 2019. Further M/s Alkyl Amines Chemicals Limited, Mr. Yogesh Kothari and M/s SYK Trading and Consulting LLP requested to company by submitting application of reclassification / declassification of shares from Promoter category to Public Category in compliance with regulation 31A of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. Your Company has duly passed the resolution for such declassification / reclassification of promoters by passing resolution in Extra Ordinary General Meeting on March 13, 2020. The application made to the BSE Limited seeking permission for such declassification / reclassification and approval received from the BSE Limited on 12th August, 2020.

Alkyl Amines Sold 4.36% stake to public shareholders and a major portion of their 30% stake was bought by the promoters. [here](#) and [here](#)

METERICS:-

A clear indication of lack of any pricing power over last several years.

Realization in Lakhs / Ton

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
M.T.				1402.282	1746.92	1952.45	1746.962	2278.19	2296.19	
Sales	57.40	43.94	39.09	35.58	34.78	38.51	47.32	71.38	65.36	66.10
Realization				2.5	1.99	1.97	2.7	3.13	2.84	

Products:- ([For more details about the product click on product names](#))

Current Products	New Products	Other Products
<ul style="list-style-type: none"> ● Piperazine Anhydrous ● Ethylenediamine [EDA] ● Diethylenetriamine [DETA] ● Polyamine-Mix ● Monoethanolamine [MEA] ● Triethylenediamine [TEDA] ● Piperazine 68% Solution 	<p style="text-align: center;">PIPERAZINE DERIVATIVES</p> <ul style="list-style-type: none"> ● N-Methyl Piperazine (NMP) ● N,N'–Dimethyl Piperazine (DMP) ● N-ethyl Piperazine (NEP) ● N,N'–Diethyl Piperazine ● 1-Amino–4–Methyl Piperazine (AMP) ● N-Formyl Piperazine ● N-Acetyl Piperazine ● N-Benzyl Piperazine ● N-Phenyl Piperazine ● N-(4–Chloro Phenyl) Piperazine ● N-(2–Chloro Phenyl) Piperazine 	<ul style="list-style-type: none"> ● 1,2–Diaminopropane ● Dipropylene Triamine ● Diacetyl Ethylenediamine (DAED) ● Tetracetyl Ethylenediamine (TAED) ● Tetra methyl Ethylenediamine (TMEDA) ● Amine Mixture Used in CO2 Capture (gas sweetening & acid gas removal)

Merger:- Scheme of Amalgamation between Diamines Speciality Chemicals and Diamines and Chemicals limited in consolidation to the merger of the business undertaking where Diamines Speciality Chemicals Limited (Transferor company) would be merged with Diamines and Chemicals Limited's business. Diamines Speciality Chemicals would cease to be subsidiary of Diamines and Chemicals (DACL) after the merger. The management provide the rationale for the merger is to get better business synergies to earn higher long term financial returns as a merged entity than two separate ones by reducing managerial overlaps and enable the house to streamline activities.

Conditional EC:-

The company got an conditional EC for 7 years from SEIAA (State Level Impact Assessment Authority) on 8/1/22 for expansion of Synthetic Organic Chemicals company's registered address (**Plot No 13 PCC Area Petrochemicals Vadodara Gujarat**) [here](#).

The Ethylene amines business is going through demand-supply imbalance on global level and this is expected to continue in the year 2019-20 also. Your company is well aware of the challenging scenario lying ahead and taking necessary steps by planning activities properly at operational stages.

Further, Machineries & Equipment pertaining to company's EDC Plant which have remained idle for considerable period of time. Your company had been exploring the various alternative usages of said plant and had been continually doing research on finding effective ways to utilize the EDC Plant. The company, as a result of its intense research, has narrowed down various options with respect to effective usage of the plant and identified three new products which could be manufactured through EDC plant. The management believes that there is a healthy demand of identified new products in the market. The Research & Development Department of the Company is presently focusing on activities related to the plant overhaul and making efforts to make it ready for the intended use in near future.

(Source:- AR 19-20)

Management:-

Curious Case of Luxury enjoyment by the management

The chairman Mr Amit Mahendran Mehta bought 4 luxurious apartments in Raheja Artesia for Rs 80 Crores. Details [here](#). Its good to enjoy luxury in life if you have earned it. As per company's records the salary of Mr Amit Mahendra Mehta is Rs 71 lakhs in 2021.

(₹ in Lakhs)

Nature of Transaction	Entities over which Key Managerial Personnel exercise significant influence	Key Managerial personnel	Relative of Key Managerial personnel	Director of WOS	Total
Remuneration paid	-	118.66	23.35	5.17	147.18
	-	-	-	-	-
Mr. G. S. Venkatachalam	-	47.43	-	-	47.43
	-	-	-	-	-
Mr. Amit M Mehta	-	71.23	-	-	71.23
	-	-	-	-	-

A salary for 71 lakhs (of course the salary is lesser and would have grown over the last few years) still not justify spending 80 crore for an apartment. Infact the cumulative profits of last 10 years for the company is 88 Crores. Amit Mehta is also holds directorship in Sadhna Nitro another listed entity where MR. Mehta only draws sitting fee and no salary. Enclosed as under .

Directorship and committee membership of Shri. Amit M. Mehta:

Sr. No.	Name of the Company	Listed / Unlisted Company	Category of Directorship	Membership in Committee
1	Tomorrowland Apparels Private Limited	Unlisted	Director	Nil
2	Finorga (India) Pvt Ltd	Unlisted	Director	Nil
3	S. Amit Speciality Chemicals Private Limited	Unlisted	Director	Nil
4	Perfo Chem (India) Private Limited	Unlisted	Director	Nil
5	Topnotch Realty Private Limited	Unlisted	Director	Nil
6	Pinami Realty Private Limited	Unlisted	Director	Nil
7	Value E-Healthcare Limited	Unlisted	Director	Nil
8	Insight Health Scan Private Limited	Unlisted	Director	Nil
9	Global-Local Lifestyle Services Private Limited	Unlisted	Director	Nil
10	Fyra Insights Private Limited	Unlisted	Additional Director	Nil
11	Sadhana nitro chem limited	Listed	Non - Executive - Independent Director	Nil -Stakeholders Relationship Committee Chairman (Chairman)
12	Diamines Chemicals Limited	Listed	Non - Executive - Whole time Director	-Corporate Social Responsibility Committee (Member)

Risk

Only 1 customer in the Specialty Chemical segment contributes to 24% of its total revenue. Fluctuating price of key raw material has high potential to impact the performance in short term. Competitors can swamp the market with excess & lower priced or even duty free products.

Valuation:-

The business is available at 13x last 3 years average cash flows which does not offer any margin of safety and looking at a giant (Balaji Amines in this case) coming up with multi x the capacity the room for growth seems limited. Also, the decrease of import prices ethel amines will trigger less room for the Diamines to sell its products.