AJC Study Note on the AMINES space in India

Both Alkyl and Balaji are the two dominant domestic producers (Oligopolistic markets), supplying bulk amines, derivatives like DMAHCl, DMF, acetonitrile, morpholines and specialty chemicals. Their value chain runs:

1. Raw Materials → Core amines production → derivative synthesis → specialty products
2. Sales come from downstream industries like pharma ~50%, agro-chem ~25%, coatings & others

Differentiating factors for Alkyl Amines over Balaji Amines:

1. Alkyl Amines is more focused on aliphatic amines and derivatives used in pharma, agrochemicals and water treatment - markets with stable global demand.
2. Alkyl Amines has maintained disciplined CAPEX, while Balaji has expanded more aggressively, sometimes stretching capacity before demand materializes.Alkyl's expansions are modular and margin-driven, focusing on import substitution and downstream value-addition.
3. Alkyl Amines has historically carried lower debt-to-equity, maintaining higher return on capital employed (RoCE).
4. Alkyl's portfolio commands premium pricing due to product differentiation and better export mix.

Differentiating factors for Balaji Amines over Alkyl Amines:

1. Wider product portfolio - aliphatic and aromatic amines, speciality solvents, performance chemicals - More prominent in downstream products - better margins
2. First mover advantage and IP know-how in Morpholine, Gamma Butyrolactone, N-Methyl-2-Pyrrolidone
3. CAPEX - Unit IV (greenfield at MIDC Chincholi) for specialty chemicals, new acetonitrile and ethylamine plant - create operating leverage. Also, they are more value added which will help improve EBITDA/kg and Realisation/kg
4. Export opportunity and China+1 advantage - Balaji's specialty products are in demand in Battery chemicals (Rise of EVs), Semiconductors (Rise of AI), Agro and pharma sectors in Europe, Korea, and Japan (Environmental

ALKYL AMINES:

1. FY20
    - Strong volume growth, margin improvement, Sales increased by 25% YoY and EBITDA increased to 34.5% YoY
    - Strong demand recovery post-COVID lockdowns
    - Increased demand for acetonitrile and ethylamines
    - Lower raw material prices boosted margins
    - EBITDA margin improved to ~28%
    - Favorable sentiments for specialty chemicals in India

2. FY21
    - Record earnings: Revenue and EBITDA grew >50% YoY
    - EBITDA margin >34% - peak margin year
    - Import substitution tailwinds
    - New ethylamines capacity commissioned in Kurkumbh
    - Share of exports rose; China+1 sentiment drove premium valuations

3. FY22
    - Announced 115-150cr for Dahej specialty chemical plant
    - Revenue dropped, EBITDA margin shrank
    - Input cost inflation (ammonia, methanol) began to pressure margin
    - Margins fell to ~26%, but volume growth sustained
    - Acetonitrile prices softened slightly
    - Kurkumbh expansion fully ramped up
    - Announced ₹350 Cr capex for Dahej (specialty chemicals)

4. FY23
    - Global slowdown impacted exports; muted volume growth
    - Margins declined to ~20–21%
    - Delay in Dahej capex execution raised investor concerns
    - Realization/kg declined marginally

5. FY24
    - Q1-Q2 impacted by safety incident at Kurkumbh leading to temporary shutdown
    - Operating deleverage led to flat topline and compressed EBITDA margin (~17%)
    - Working capital stretched due to higher RM costs
    - Management commentary conservative; slower offtake in agrochemicals and exports

6. FY25
    - Q1FY25: Revenue up 18% YoY; PAT surged 74% YoY
    - Higher contribution from specialty intermediates
    - Operating margin expanded to ~22% as RM inflation eased
    - Renewed investor optimism on Dahej ramp-up (expected FY26)
    - Benefiting from China export curbs and supply tightness in global ethylamines market

Key product categories:

Product Category	Key Products	Current Installed Capacity
Aliphatic Amines	Methylamines, Ethylamines, Isopropylamine, Propylamines, Butylamines	~80,000-90,000 TPA combined across sites
Methylamines		~30,000 TPA (currently ~70% utilization) at Dahej; proposed ramp to ~120,000 TPA over 5 years
Ethylamines		~10,000 TPA at Patalganga / Kurkumbh site, plus large new world-scale plant at Kurkumbh
Amine Derivative	DMAHCl, DEAHCl, DEHA, DMCHA, DMAPA, hydrochlorides, etc.	Part of the ~80-90 k TPA overall capacity; derivative plants at Kurkumbh & Dahej (derivative-specific capacity not disclosed)
Specialty Chemicals	Acetonitrile (2 plants), Specialty amines, corrosion inhibitors, insect repellents (DETA), intermediates	Installed across Kurkumbh & Dahej; acetonitrile plants 1 & 2 commissioned by 2022–23; specialty amine plant commissioned 2021

Announced CAPEX plans:

Product	Capacity	CAPEX	Timeline
New speciality chemical	3-4k TPA	115-150 Cr	15-50 months (from Nov 2024)

Future Outlook:

1. The global alkylamines market is projected to grow at a CAGR of ~6 - 6.8%, rising from USD 6.6 bn in 2024 to USD 10-12 bn by 2030-33. Asia-Pacific, especially India and China, is expected to drive over 40-50% of the global demand, led by booming agrochemicals, pharma, water treatment, coatings, and industrial sectors.
2. Dahej specialty plant (3-4k TPA) will be live by early 2026-2029, enabling entry into higher-value specialty segment
3. Shift from commodity bulk amines to specialty/intermediate chemicals (acetonitrile, DETA, corrosion inhibitors) - superior margins (~20-25%+ potential vs. 15–18% for bulk amines)
4. Management has reaffirmed intent to return to ~20-22% sustainable EBITDA margins as specialty projects ramp up
5. India’s high barriers to entry, especially in handling of amine chemicals

BALAJI AMINES:

1. FY20
    - Resilient pharma & agro demand despite early COVID
    - Low crude prices helped maintain margin stability
    - Began receiving benefits of earlier capex in DMF and methylamines

2. FY21
    - Explosive rally in pharma & agrochemicals, with Balaji a major beneficiary of amines demand
    - MF prices skyrocketed (from ₹60 to ₹200/kg range), boosting EBITDA margins, Capacity utilization improved significantly
    - Received environmental clearance and announced capex for new greenfield units, Market rewarded chemical companies heavily during COVID-led supply chain disruptions
    - EPS growth of 4x YoY

3. FY22
    - Continued strong realisation for key products like NMP, DMF, and methylamines
    - New Unit IV commercialized, adding value-added products like acetonitrile and specialty solvents,
    - Balaji Specialty Chemicals (subsidiary) grew in prominence with good margin profile Rising visibility of export demand and long-term contracts
    - Margins peaked at ~35% EBITDA in several quarters

4. FY23
    - Higher input cost pressures and operating deleverage
    - Delay in some capex commercialization (Unit V)
    - Weak sentiment across chemical sector due to falling realizations and higher interest rates

5. FY24
    - Gradual recovery in volumes, especially domestic pharma and solvents
    - Balaji Specialty Chemicals filed DRHP for IPO – improved investor sentiment
    - Margin improvement as raw material prices cooled off
    - Increased focus on battery-grade solvents and international markets

6. FY25
    - Revival in export demand and China+1 sentiment supporting contract wins
    - Balaji Specialty Chemicals' potential IPO is seen as value unlocking
    - Entry into green chemistry, battery chemicals, and electronic-grade solvents under government PLI schemes

Key product categories:

Product / Product Category	Installed Capacity (TPA)	Details
Total Aliphatic Amines	~112,500 TPA	Capacity across methyl, ethyl, isopropyl, butyl amines
Amines Derivatives	~45,000 TPA	Includes DMAHCl, DMF/NMP, DMAC, morpholine, etc.
Specialty Chemicals	~45,330 TPA	Specialty portfolio including acetonitrile, morpholine, PVP-K, etc.
Acetonitrile	~9,000 TPA	Commissioned after trial runs; separate capacity noted
Dimethyl Carbonate (DMC)	15,000 TPA	High-purity grade; first and only in India
Propylene Glycol (PG)	15,000 TPA	Technical and pharma/USP grades at Unit IV
Morpholine	(Capacity included in specialty bucket)	BIS-certified, only Indian manufacturer

Announced CAPEX plans:

Product	Capacity	CAPEX	Timeline
Methylamine expansion	Additional ~40,000 TPA (total ~88,000)	₹100-150 Cr (standalone plan)	Q2 FY 2024-25 (≈ Dec 2024)
n-Butylamine plant (Unit IV)	~15,000 TPA	Part of ₹300-350 Cr standalone capex	Commissioned by Q4 FY 2023-24
Dimethyl Ether (DME) plant	~100,000 TPA	Included in ~₹100-150 Cr standalone	By March 2025 / FY 2024-25
Electronic-grade DMC upgrade	15,000 TPA	Upgrade capex (within standalone)	May 2025
Propylene Glycol pharma-grade	15,000 TPA	Within broader standalone capex	FY 2025-26 Q1

N-Methyl Morpholine (NMM)	~3,000 TPA	Under special-ty capex (balaji spec.)	End FY 2024-25
NBPT (N-butyl thiophosphoric triamide)	~2,500 TPA	Under special-ty capex	End FY 2024-25
Isopropylamine (mono & di)	Capacity TBD (via unit I mods)	Included in specialty project or unit mod costs	FY 2025-26
Greenfield Solar Power Plant (Solapur)	20 MW	₹120 Cr for greenfield + ₹16 Cr rooftop phase I	Full plant by March 2025 (8 MW by Dec 2024)
Balaji Speciality Chemicals (subsidiary): specialty derivatives (e.g., cyanides, EDTA, BnCN, PAA, TEOF/TMOF)	Planned capacity per product varying	₹750 Cr total; Phase 1: ₹350–400 Cr	Phase 1 by end FY 2025-26

Future Outlook:

1. Ongoing expansions: methylamine (40k TPA), n-butylamine (15k TPA), DME (100k TPA), upgraded DMC, pharma-grade propylene glycol. Almost all capacities expected online in FY26
2. Balaji Specialty Chemicals Limited is setting up a greenfield facility (Phase 1 capex ₹350-400 Cr) for hydrogen cyanide, sodium cyanide, EDTA, benzyl cyanide, PAA, TEOF/TMOF, expected operational by FY26
3. Sequential commissioning of N-Methylmorpholine and NBPT projected within FY25-26; acetonitrile expansion by FY27
4. Global amines demand projected to grow at ~5.5-7.5% CAGR (2023-28/33), with India benefiting from the China+1 shift
5. Indian sectors - pharma (~10% growth/year) and agrochemicals (~9-10%) - continue to fuel domestic demand for amines and derivatives

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