The chemicals business can be grouped into petrochemicals, basic chemicals, specialties and performance chemicals in increasing degrees of value addition.

- Amines could be classified as Specialty Chemicals.
In the middle - Amines

- Petrochemicals
- Basic chemicals
- Specialties
- Performance chemicals
What are AMINES?

Amines are products derived from Ammonia (NH₃) by displacement of H₂ in the Ammonia molecule by other radicals (R) such as Methyl, Ethylene and Propanol.

Structurally, three types of amines are formed – Primary/Secondary/Tertiary based on number of hydrogen atoms displaced.

Primary Amine : R – NH₂
Secondary Amine : R₂ – NH
Tertiary Amine : R₃ – N

The ‘Nitrogen’ in an amine has the property of 3 valences. This versatility allows the ‘Amine’ compound to shuttle between various phases and act as a carrier of the ‘Active’ compounds. This property finds varied applications.
What are the categories of Amines?

The composition of the ‘R’ group in the amine structure defines the categories of the amines.

**Aliphatic**: Where ‘R’ is the alkyl group with 6 carbons or less. Examples are Methylamines, Ethylamines etc.

**Ethylene**: Where ‘R’ is the ‘Ethylene’ group. Typically these amines have more than one ‘NH3’ group and are also called ‘Diamines’. Examples are Ethylene Diamine (EDA), Diethylene Triamine (DETA)

**Alkanol**: Where ‘R’ is the alkanol group. Examples are Ethanolamines, Propanolamines.

**Mixed / Complex**: These are amines where more than one type of ‘R’ group combine with a ‘Amine’ group.

Examples are, DimethylAminoPropylamine DimethylEthylamine, Diethylhydroxylamine, etc.
Current Alkyl Industry Profile 2014-15

- Pharma: 45%
- Agro: 2%
- Dyes: 29%
- Trading: 4%
- Speciality: 10%
- Water Treatment: 6%
- Foundary Chemical: 2%
- Oil & Gas: 2%

World Consumption of Aliphatic Amines End-use wise

- Solvents: 44%
- Pesticides: 15%
- Feed Additives: 8%
- Rubber: 7%
- Water treatment: 7%
- Surfactants: 5%
- Paper & Textiles: 4%
- Pharmaceuticals: 4%
- Others: 2%
Introduction to Alkyl Amines Chemicals Ltd

- Alkyl Amines Chemicals Ltd (Alkyl) is a public limited listed company incorporated in 1979.
- Listed on BSE & NSE.
- Alkyl is a global supplier of amines and amine-based chemicals to the pharmaceutical, agrochemical, rubber chemical & water treatment industries, among others.
- Over 30 years expertise in Amine technology.
- Alkyl has a significant stake in Diamines and Chemicals Ltd., the only manufacturer of ethylene-amines in India.
- Number of people employed – 430.
The Responsible Care initiative of the Indian Chemical Council aims to improve the compliances of its member companies to international standards in sustainability covering health, safety, environment, energy and community interactions.

This year we were awarded the Responsible Care certification to join a group of less than 50 companies in India.

Alkyl has always emphasized its commitment to providing quality products, ensuring a low foot print on the environment and safety at work. We have been in the past awarded with the ISO 9000, 14000, and 18000 certificates and are working towards a 50001 certification for energy conservation.
Alkyl’s Product Range

- Aliphatic Amines
- Amine Derivatives
- Specialty Amines
Journey so far

- Ethyl Amine
- Cyclohexyl Amine
- Butyl
- Isopropyl
- Methylamines
- DMA-HCL / TEA-HCL / DEA-HCL
- DEET / DEPA
- DEHA
- Specialty Hydrogenated Amines
- Ethyl Amines
- DMA - HCL
- ACN
- DMA - HCL
- ACN
- Powder Plant Debottlenecking

1982 Plant I
1986 Plant-I: Expansion
1992 Plant-II
1996 Amine HCL Soln Plant
1996 MPP
1996 MPP II
1997 MPP III : R2
1998 MPP III : R3
2001 Plant-III
2003 MPP III : R4
2010 Powder Plant
2010 Acetonitrile
2012 Powder Plant Expansion
2013 Acetonitrile Expansion
2014 Acetonitrile Debottlenecking
2014
2014
2014
Operations

Locations

1. Corporate office - Worli, Mumbai
2. Registered office - Vashi, Navi Mumbai
3. Nine Manufacturing plants at Kurkumbh, Pune,
4. Two Manufacturing plants at Patalganga, Raigad,
5. R & D and Technology centre – Pune
7. Upcoming site - Dahej, Gujarat
Management Team

Chairman and Managing Director

**Yogesh M. Kothari**

Executive Director (Operations)

**Kirat Patel**

Executive Director (Commercial)

**Suneet Kothari**

**Non-Executive Directors**

- Hemendra M. Kothari
- Shyam B. Ghia
- Shoban Thakore
- Dilip Piramal
- Premal Kapadia
- K.R. V. Subramanian
- Tarjani Vakil
Strengths

- A wide palette of products (100+). Most developed in house.
- Global leader in Ethyl amines.
- One of the leading players globally in DEHA (Diethyl hydroxyl amine)
- One of the largest producers of DMA-HCL
- Leading producer of Acetonitrile with a unique process
- Globally leading manufacturer of various specialty amines
- Dominant Indian manufacturer of most of our product range
- Strong in commercialization of processes through in-house team
- Reputation as a reliable, ethical supplier.
Alkyl has two manufacturing sites with Eleven plants in western Maharashtra, covering approximately Eighty acres

- The Patalganga site of around Ten acres is Seventy Five Kilometers from Mumbai. Methylamines & higher aliphatic amines are manufactured here.
- The Kurkumbh site covering Seventy acres is Sixty Kilometers from Pune. Ethylamines, Amine Derivatives & Specialty Amines are manufactured here.
- A new site of approx. Twenty Five acres is being developed to expand our Amines and Amines derivative capacities in Dahej, Gujarat about Three Hundred Kilometers north of Mumbai.
Manufacturing Strengths

- **Reactions:**
  - Reductive Amination
  - Hydrogenation
  - Cyanoethylation
  - Oxidation
  - Amidation

- **Distillations**
  - Pressure / Atmospheric / Vacuum
  - Fractional / Azeotropic
  - Continuous / Batch.

- **Powder making facilities**

- **Multi purpose plants**
<table>
<thead>
<tr>
<th>Year - 2015</th>
<th>Aliphatic Amines</th>
<th>Derivatives</th>
<th>Specialty Chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>34,000*</td>
<td>17,000*#</td>
<td>7,400*</td>
</tr>
<tr>
<td>Production</td>
<td>27,406</td>
<td>13,719</td>
<td>4,251</td>
</tr>
</tbody>
</table>

* Approximate Figure.
# Include Sub contractor.
The Key Inputs are:

- Ammonia,
- Alcohols (Ethanol, Methanol, Iso propanol, 2EthylHexanol etc)
- Acetic Acid.
- Fuel (Coal, Bagasse, LSHS)
- Electricity (Grid, Cogen, Solar)
Gross Revenue (Rs. Crores)

CAGR(5 years) = 18%  CAGR(3 years) = 19%

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Domestic</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2011</td>
<td>200</td>
<td>49</td>
</tr>
<tr>
<td>FY2012</td>
<td>237</td>
<td>65</td>
</tr>
<tr>
<td>FY2013</td>
<td>310</td>
<td>80</td>
</tr>
<tr>
<td>FY2014</td>
<td>379</td>
<td>96</td>
</tr>
<tr>
<td>FY2015</td>
<td>419</td>
<td>89</td>
</tr>
</tbody>
</table>
Gross Revenue Break-up (Rs Crores)

- **Aliphatic Amines**
  - FY 2012: 196
  - FY 2013: 240
  - FY 2014: 267
  - FY 2015: 264

- **Amine Derivatives**
  - FY 2012: 96
  - FY 2013: 121
  - FY 2014: 145
  - FY 2015: 151

- **Specialities**
  - FY 2012: 10
  - FY 2013: 28
  - FY 2014: 63
  - FY 2015: 93
EBITDA/PAT

<table>
<thead>
<tr>
<th>Year</th>
<th>EBITDA (Rs crs.)</th>
<th>PAT (Rs crs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2010</td>
<td>36</td>
<td>10</td>
</tr>
<tr>
<td>FY2011</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>FY2012</td>
<td>45</td>
<td>17</td>
</tr>
<tr>
<td>FY2013</td>
<td>59</td>
<td>24</td>
</tr>
<tr>
<td>FY2014</td>
<td>87</td>
<td>43</td>
</tr>
<tr>
<td>FY2015</td>
<td>88</td>
<td>45</td>
</tr>
</tbody>
</table>

EBITDA % of Net Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>EBITDA % of Net Sales</th>
<th>PAT % of Net Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2010</td>
<td>17.1</td>
<td>4.7</td>
</tr>
<tr>
<td>FY2011</td>
<td>14.0</td>
<td>4.4</td>
</tr>
<tr>
<td>FY2012</td>
<td>15.5</td>
<td>6.0</td>
</tr>
<tr>
<td>FY2013</td>
<td>16.1</td>
<td>6.5</td>
</tr>
<tr>
<td>FY2014</td>
<td>19.4</td>
<td>9.6</td>
</tr>
<tr>
<td>FY2015</td>
<td>18.6</td>
<td>9.5</td>
</tr>
</tbody>
</table>
Capital Employed (Rs crores)

- **Net Fixed Assets**
  - FY2010: 112
  - FY2011: 121
  - FY2012: 128
  - FY2013: 135
  - FY2014: 157
  - FY2015: 182

- **Net Current Assets**
  - FY2010: 86
  - FY2011: 76
  - FY2012: 89
  - FY2013: 120
  - FY2014: 139
  - FY2015: 138
Capital Employed (Rs crores)

- **Debt**
  - FY2010: 114
  - FY2011: 120
  - FY2012: 123
  - FY2013: 145
  - FY2014: 150
  - FY2015: 134

- **Net Worth**
  - FY2010: 70
  - FY2011: 76
  - FY2012: 89
  - FY2013: 107
  - FY2014: 140
  - FY2015: 185
## Yearly Financial

<table>
<thead>
<tr>
<th>Particulars</th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Income from Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Net Sales/Income from Operations (net of excise duty)</td>
<td>28,151</td>
<td>35,897</td>
<td>44,029</td>
<td>46,798</td>
</tr>
<tr>
<td>b. Other Operating Income</td>
<td>650</td>
<td>689</td>
<td>581</td>
<td>839</td>
</tr>
<tr>
<td><strong>Total Income from Operations (net)</strong></td>
<td><strong>28,801</strong></td>
<td><strong>36,586</strong></td>
<td><strong>44,610</strong></td>
<td><strong>47,637</strong></td>
</tr>
<tr>
<td>2. Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Cost of Materials Consumed</td>
<td>15,650</td>
<td>20,028</td>
<td>24,051</td>
<td>25,915</td>
</tr>
<tr>
<td>c. Employee Benefits Expense</td>
<td>1,605</td>
<td>2,088</td>
<td>2,591</td>
<td>3,118</td>
</tr>
<tr>
<td>d. Other Expenses (net)</td>
<td>7,185</td>
<td>8,579</td>
<td>9,307</td>
<td>9,755</td>
</tr>
<tr>
<td>e. Depreciation and Amortization</td>
<td>891</td>
<td>1,003</td>
<td>974</td>
<td>1,135</td>
</tr>
<tr>
<td>f. Finance costs</td>
<td>1,103</td>
<td>1,294</td>
<td>1,224</td>
<td>1,023</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>26,434</strong></td>
<td><strong>32,992</strong></td>
<td><strong>38,148</strong></td>
<td><strong>40,946</strong></td>
</tr>
<tr>
<td>3. Profit/(Loss) before Tax</td>
<td>2,367</td>
<td>3,593</td>
<td>6,462</td>
<td>6,691</td>
</tr>
<tr>
<td>4. Tax Expense</td>
<td>652</td>
<td>1,200</td>
<td>2,174</td>
<td>2,149</td>
</tr>
<tr>
<td>5. Net Profit / (Loss) after tax</td>
<td><strong>1,715</strong></td>
<td><strong>2,393</strong></td>
<td><strong>4,288</strong></td>
<td><strong>4,542</strong></td>
</tr>
</tbody>
</table>
### Quarterly Financial for the year 2014-15 and 2015-16

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Q1 15-16</th>
<th>Q1 14-15</th>
<th>Q2 14-15</th>
<th>Q3 14-15</th>
<th>Q4 14-15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Income from Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Net Sales/Income from Operations (net of excise duty)</td>
<td>12,583</td>
<td>12,425</td>
<td>11,693</td>
<td>11,103</td>
<td>11,577</td>
</tr>
<tr>
<td>b. Other Operating Income</td>
<td>258</td>
<td>265</td>
<td>92</td>
<td>292</td>
<td>190</td>
</tr>
<tr>
<td><strong>Total Income from Operations (net)</strong></td>
<td>12,841</td>
<td>12,690</td>
<td>11,785</td>
<td>11,395</td>
<td>11,767</td>
</tr>
<tr>
<td><strong>2. Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Cost of Materials Consumed</td>
<td>6,907</td>
<td>7,289</td>
<td>6,307</td>
<td>6,063</td>
<td>6,256</td>
</tr>
<tr>
<td>c. Employee Benefits Expense</td>
<td>935</td>
<td>773</td>
<td>838</td>
<td>709</td>
<td>798</td>
</tr>
<tr>
<td>d. Other Expenses net</td>
<td>2,636</td>
<td>2,233</td>
<td>2,502</td>
<td>2,536</td>
<td>2,484</td>
</tr>
<tr>
<td>e. Depreciation and Amortization</td>
<td>291</td>
<td>269</td>
<td>295</td>
<td>288</td>
<td>283</td>
</tr>
<tr>
<td>f. Finance costs</td>
<td>233</td>
<td>287</td>
<td>262</td>
<td>240</td>
<td>234</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>11,002</td>
<td>10,851</td>
<td>10,204</td>
<td>9,836</td>
<td>10,055</td>
</tr>
<tr>
<td><strong>3. Profit/(Loss) before Tax</strong></td>
<td>1,839</td>
<td>1,839</td>
<td>1,581</td>
<td>1,559</td>
<td>1,712</td>
</tr>
<tr>
<td><strong>4. Tax Expense</strong></td>
<td>640</td>
<td>596</td>
<td>533</td>
<td>506</td>
<td>514</td>
</tr>
<tr>
<td><strong>5. Net Profit / (Loss) after tax</strong></td>
<td>1,199</td>
<td>1,243</td>
<td>1,048</td>
<td>1,053</td>
<td>1,198</td>
</tr>
</tbody>
</table>
Although the sales tonnage has gone up by 16% in the quarter ending June, 2015 compared to similar quarter of last year, the net sales by value has gone up only 1% because of a reduction in selling prices.

Although Raw material prices have dipped in current quarter, contribution margins are relatively same due to corresponding decline in product prices.

EBIDTA in Jun-15 quarter is 18.78% compared to 19.28% in Jun-14 quarter. The EBIDTA has reduced owing to increase in other overheads.

Employee costs have increased in Jun-15 quarter compared to earlier quarters due to annual increments and incentives paid. Other Expenses include Foreign Exchange Loss as against gain in corresponding previous year quarter.
Integrated Management System Certification.

ISO 9001 - Quality Management System
ISO 14001 - Environmental Management System
ISO 18001 - Occupational Health & Safety Management System

Responsible care Certification.

Rating by Crisil:
A stable – Long Term
A+ - Short Term