

28<sup>th</sup> May 2008

## BUY

Price	Target Price
<b>Rs 408</b>	<b>Rs 529</b>

**Sensex - 16,525**

### Price Performance

(%)	1M	3M	6M	12M
Absolute	15	31	29	59
Rel. to Sensex	18	41	46	40

Source: Bloomberg

### Stock Details

Sector	Fertilisers
Reuters	TTCH.BO
Bloomberg	TTCH@IN
Equity Capital (Rs mn)	2342
Face Value (Rs )	10
No of shares o/s (mn)	234
52 Week H/L (Rs )	431/231
Market Cap (Rs bn /USD mn)	96/2,241
Daily Avg Vol (No of shares)	755196
Daily Avg Turnover (US\$ mn)	5.9

### Shareholding Pattern (%)

	31/3/08	31/12/07	30/9/07
Promoters	29.2	29.9	31.6
FII/NRI	10.8	8.9	6.0
Institutions	30.4	30.9	30.8
Private Corp.	5.3	5.5	5.3
Public	24.3	24.8	26.4

Source: Capitaline

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# Tata Chemicals

Company Update

## Riding on commodity cycle

Tata Chemicals (TCL) is now world's 2<sup>nd</sup> largest soda ash manufacturer with total installed capacity of 5.5 mn mt (12% of world production) and 3<sup>rd</sup> largest producer of soda ash through natural process commanding 22% of world's share. We believe, TCL to benefit significantly from recent rally in soda ash prices. We believe that price increase in soda ash is more than to cover cost increase and should result in incremental EBITDA / mt of approximately US\$ 15/ mt. In spot market, soda ash prices are up by approximately 70-80% and quoting close to US\$ 400 / mt+. We expect soda ash prices to remain firm in global market in medium term on account of tight demand supply scenario. We are revising our price target from Rs 343 to Rs 529, an upside of 29% from current level, based on 11x FY10E estimated earnings and maintain BUY. We believe that TCL is ready to benefit from sharp rally in soda ash prices which may continue for next 2-3 years on account of tight demand supply scenario in global market.

### TCL – 2nd largest soda ash manufacturer in world

TCL, after the recent acquisition of US based General Chemicals (GCIP) with installed capacity of 2.5 mn mt of natural soda ash, has become world's 2nd largest soda as manufacturer with 12% market share. Natural soda ash now comprises of ~65% of total TCL's capacity while TCL holds approximately 22% of world natural soda ash capacity.

### Firm outlook on soda ash prices in medium term

Recently GCIP (recently acquired by TCL) has increased its list prices for bulk dense soda ash by US\$ 50/ mt (~24%) and off list prices by US\$ 70 / mt (~40%). We expect that price hike is more than to cover cost push and should result in incremental EBITDA of approximately US\$ 15 / mt. GCIP acquisition and rise in EBITDA / mt has increased our FY09E estimates by Rs 9.7 (31%) to Rs 40.9. We believe that soda ash prices to remain firm in medium term on account of tight demand supply scenario.

### PAT to grow at 32% CAGR

We are introducing our FY10E estimates for the company and expect TCL's consolidated revenues to grow at a CAGR of 19.8% to Rs 100 bn by FY10E. We expect EBITDA growth of 32.8% CAGR and PAT growth of 32.1%. We expect TCL to report an EPS of Rs 40.9 and Rs 48.1 by FY09E and FY10E.

### Reiterate BUY with price target of Rs 529

We are revising our price target from Rs 343 to Rs 529, an upside of 29% from current level. Our price revision is to factor (1) Rollover of price target from FY09 to FY10E estimates (2) Benefit of rising soda ash prices (3) Benefit of rising phosphoric acid prices at IMACID and (4) Considering impact of recent acquisition of GCIP. We believe that TCL is ready to benefit from sharp rally in soda ash prices which may continue for next 2-3 years on account of tight demand supply scenario in global market. At our target price, the stock trades at P/E of 10.0x and 8.5x FY09E and FY10E estimated earnings and EV/EBITDA of 7.3x and 6.4x, respectively.

### Key Financials

	(Rs mn)									
	Net Sales	EBITDA (Core)	EBITDA (%)	PAT	EPS (Rs)	ROCE (%)	EV/ EBITDA	P/BV	Div Yld (%)	P/E
YE-Mar										
FY07	58096	10105	17.4	5080	23.6	14.7	12.6	3.7	1.6	17.3
FY08E	62616	10411	16.6	5091	20.9	15.8	11.3	3.3	1.7	19.6
FY09E	90795	20812	22.9	9954	40.9	17.8	7.3	2.2	2.0	10.0
FY10E	99861	23674	23.7	11717	48.1	17.7	6.4	1.6	1.8	8.5

## Investment positive

### Tata chemicals has become world's 2nd largest soda ash manufacturer

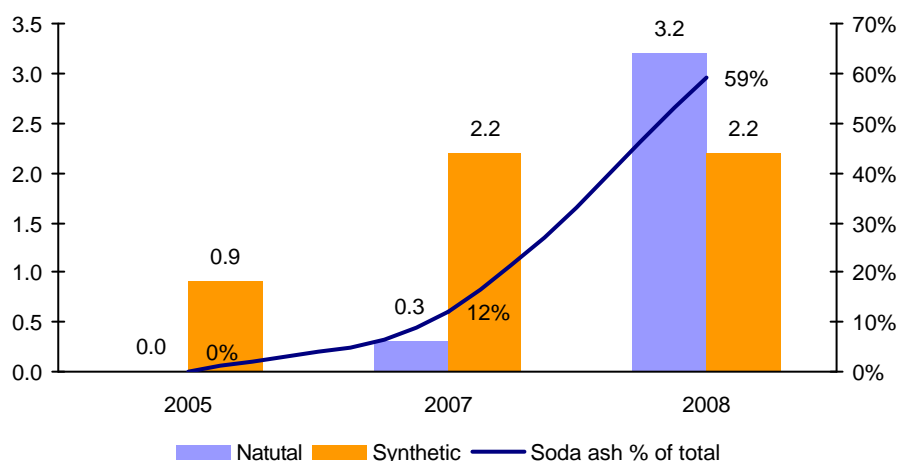
Natural soda ash contributes 60% of  
TCL's total soda ash capacity

TCL is now world's 2<sup>nd</sup> largest soda ash manufacturer with total installed capacity of 5.4 mn mt commanding ~12% of world capacity followed by Solvay (15% of global capacity). Natural soda ash contributes 60% of the total capacity (3.2 mn mt) and balance 40% (2.2 mn mt) is synthetic soda ash. TCL, after the acquisition of US based General Chemicals (GCIP), has presence across the globe. However TCL has now become 3<sup>d</sup> largest natural soda ash manufacturer with 3.2 mn mt capacity followed by FMC corporation with 4.4 mn mt capacity and 3.5 mn mt of Solvay.

### Revenue contribution from Soda Ash increased to 60%

TCL has now emerged as a pure soda ash company over a period of time since contribution from to TCL's consolidated revenues from soda ash business is expected to increase from mere 20% in FY05 to 60% by FY10E and TCL a single product player.

#### Rising share of natural soda ash capacity in TCL



Source: Emkay Research

### Expanding absolute cost advantage to natural soda ash

Cost advantage to natural soda ash has  
increased from US\$ 46 / mt to US\$ 92 /  
mt in absolute term

Natural soda ash enjoys benefit of lower production cost by approximately 50% than the synthetic soda ash. However in a rising price scenario, advantage to natural soda ash manufacturers will increase in absolute terms. In last one year, raw material cost for synthetic soda ash has increased by approximately 68% US\$ 188 / mt primarily on account of sharp rise in coal and coke. Cost for natural soda ash has also increased by ~46% to US\$ 96 / mt, mainly driven by rising gas and coal prices. However cost pressure has been in both the process, we believe, cost advantage to natural soda ash has increased from US\$ 46 / mt to US\$ 92 / mt in absolute term and from 41% to 49% percentage. (Please see table below).

## Cost advantage – Natural Soda Ash v/s Synthetic Soda Ash Manufacturer

	I-O ratio			Price Rs / mt	Cost / mt of soda ash		
		Previous	Current	% increase	Previous	Current	% increase
Synthetic soda ash							
Coal for steam (mt)	0.53	2400	3750	56%	1265	1976	56%
Limestone (mt)	1.50	600	900	50%	900	1350	50%
Coke (mt)	0.12	8000	18000	125%	960	2160	125%
Industrial Salt (mt)	1.70	800	1200	50%	1360	2040	50%
Total RM cost (Rs / mt)					4485	7526	68%
Total (US\$ / mt)					112	188	68%
Incremental US\$ / mt						76	
Natural Soda ash							
Labour	1.00	1040	1204	16%	1040	1204	16%
Natural gas	2.83	280	462	65%	792	1307	65%
Coal	0.18	2400	3750	56%	432	675	56%
Coke	0.03	8000	18000	125%	216	486	125%
Others	1.00	160	176	10%	160	176	10%
Total RM cost (Rs / mt)					2640	3848	
Total (US\$ / mt)					66	96	46%
Incremental US\$ / mt						30	
Cost advantage (Natural - Synthetic)							
US\$ / mt					-46	-92	
%					-41%	-49%	

Source: Emkay Research

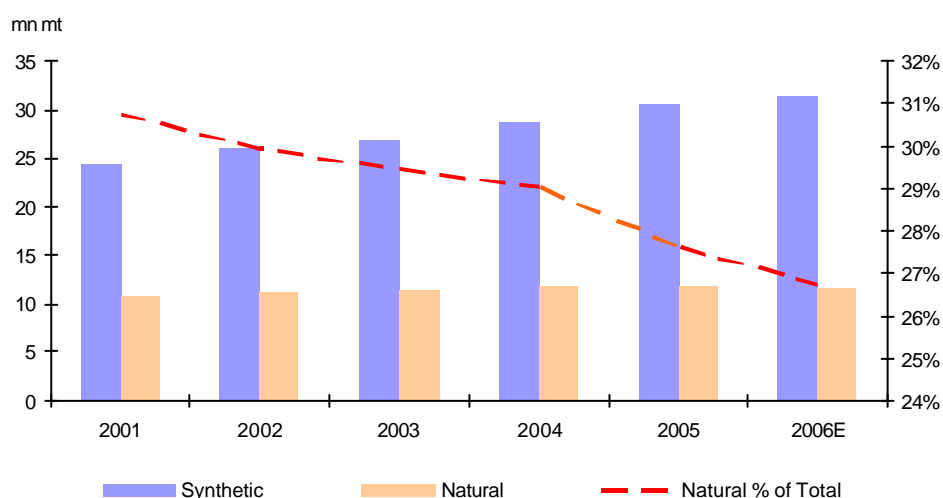
As on one side limestone, industrial salt and coke and coal are the key raw materials for synthetic soda ash, natural gas, coal and coke are the key ingredients for manufacturing of natural soda ash. However compared to synthetic soda ash, natural soda ash is also dependent on crude prices because of high transportation cost. We believe that sharp rally in crude prices (crude at level US\$ 130 / barrel) will take some sheen from the absolute cost advantage.

## Synthetic soda ash leads the show globally

Globally synthetic soda ash comprises of approximately 27% of total production and hence cost pressure on synthetic soda ash leads to price revision.

Share of natural soda ash came down from 30% to 27%

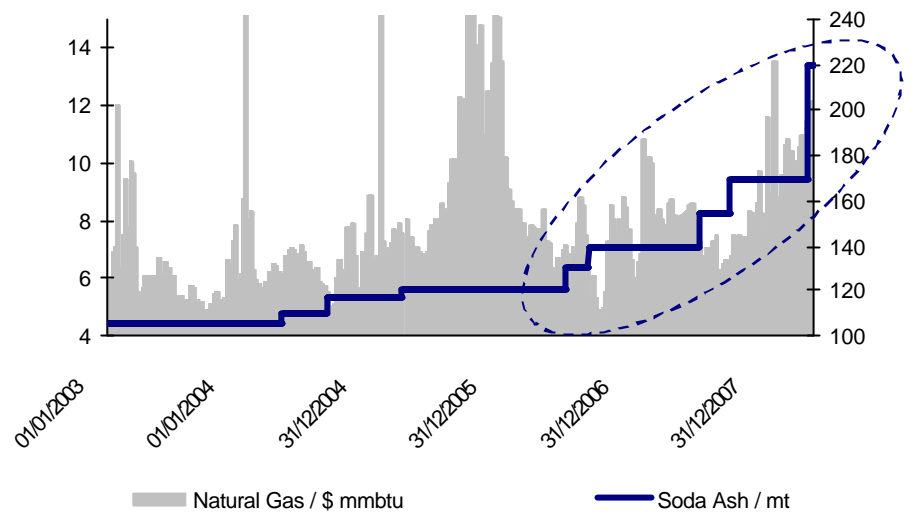
## Synthetic Soda Ash dominates the market



Source: US Geological Survey, Emkay Research

## Rising NG prices and increase in soda ash prices by natural soda ash players

Price increase by natural soda ash player is more than to cover increase in natural gas prices



Source: Bloomberg, GCIP, FMC, Emkay Research

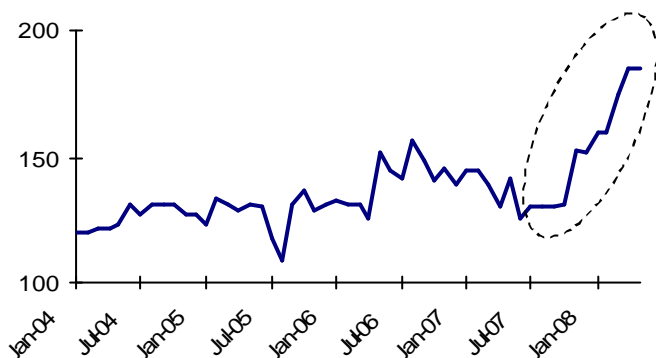
## Strong positive view on global soda ash prices

GCIP increased its list prices by ~24% and off list prices by ~40%

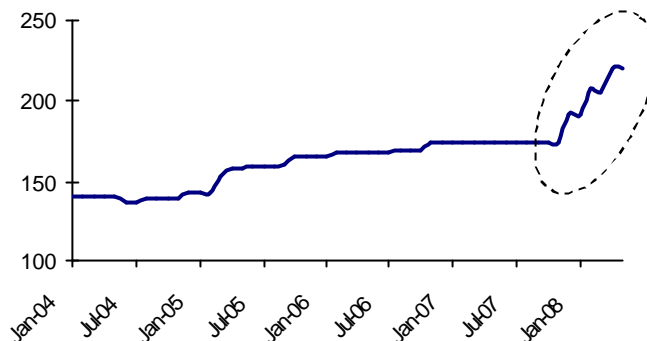
### Sharp rally in soda ash prices

GCIP recently increased its off list price for bulk dense soda ash by 50 US\$/ mt to US\$ 260 / mt, an increase of ~24% while increase in off list price was US\$ 75 / mt (~40%). FMC Wyoming corporation also supported the price increase by announcing price hike of by US\$ 50 / mt to US\$ 220 / mt, which is an increase of 29%.

Soda Ash \$ / ton



India Wholesale Price Index – Soda Ash



Source: Bloomberg, Emkay Research

Price increase in soda ash is more than to cover cost increase

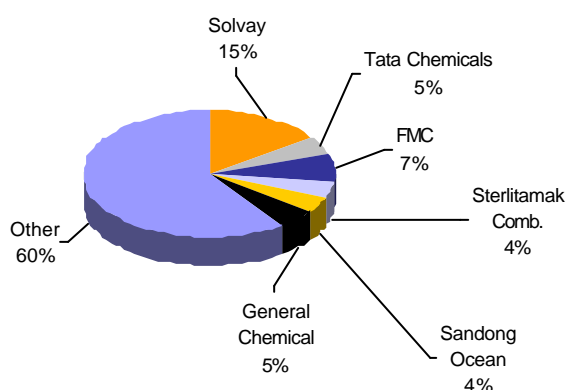
### Significant cost pressure

We expect soda ash prices to remain buoyant globally as well as domestically. Index for global soda ash prices have notched up to US\$ 185 / mt by May'2007 (Dense soda ash, Source – Bloomberg) which are up by approximately 30% in last 12 months. Soda ash prices have been running ahead on account of cost push and demand pull. Energy prices have increased significantly – Natural gas prices increased by 53% to US\$ 11.4 / mmbtu and crude prices are up by 84% to US\$ 123.7 / gallon by May'08. However increase in soda ash prices has been more than to cover rising cost pressure leading to margins expansion.

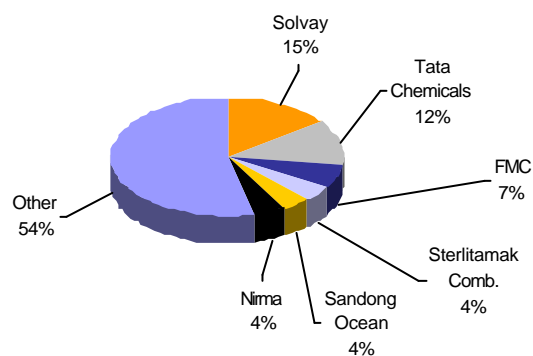
### Consolidation – enhancing producer's discipline

US is the largest exporter of soda ash, since only about 55% is consumed domestically and balance 45% is exported in destinations like Europe and other countries. M&A activities has increased in soda ash industry in last two years and now 4 largest players commands approximately 45% of world capacity.

Global Soda Production, 2007



Global Soda Production, 2008 E



Source: Crisil Research, Emkay Research

Strong demand is witnessing incremental requirement of ~1.5 mn mt per year while supply is not keeping pace with

### Demand supply remains tight

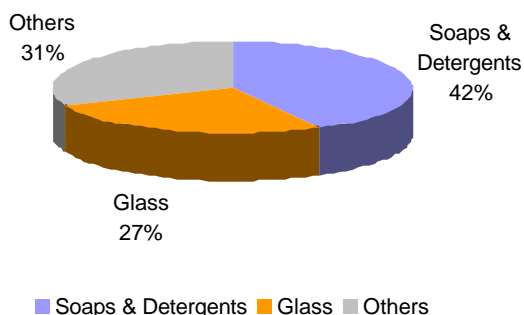
Globally demand for soda ash is expected to grow at an average of 34%, requiring an additional production of approximately 1.5 mn mt per year. Plants in China, US and Europe are currently operating at peak rate and hence there is requirement of fresh capacity additions to meet demand growth. Export demand has driven the production in US and plants are operating at high levels. In Europe domestic demand is being driven by the construction sector, resulting in high operating rates. China with robust domestic demand and a low rate of capacity addition is witnessing high operating rates.

ANSAC (American Natural Soda Ash Corporation), which is selling and marketing arm for soda ash exports of US based players, expects demand supply conditions to remain extremely tight in year 2008 and 2009. ANSAC expects overall global demand to increase by 5.5% to 49.7 mn mt by 2008.

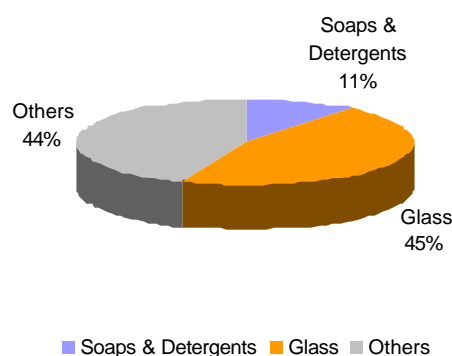
### Key user industry for soda ash remains upbeat

Glass and detergent are two key user industry of soda ash while it also finds its application in manufacturing of pulp and paper, water treatment, sodium silicate and various other chemicals. Demand is expected to remain strong in medium term with world flat glass consumption is expected to record growth of 4.9%. Automotive industry, which is also another key user industry of glass is expected to report 4% CAGR.

#### Domestic Soda Ash Consumption



#### Global Soda Ash Consumption



Source: Crisil Research, Emkay Research

### Flat Glass Outlook

	2001	2006	2007	2008	2009	2010	CAGR**
Japan	1.2	1.4	1.3	1.3	1.3	1.3	-1.7%
China	8	13.8	14.9	16.1	17.3	18.6	7.7%
Other Asia	3.7	4.8	5	5.2	5.4	5.5	3.5%
North America	5.8	6.3	6.2	6.3	6.5	6.6	1.1%
C&S America	1.2	1.5	1.6	1.7	1.8	1.9	5.6%
West Europe	7	7.3	7.4	7.6	7.7	7.9	2.0%
C&E Europe (*)	2.5	5	5.4	5.9	6.3	6.7	7.6%
Other Regions	1.3	1.8	1.9	2	2.1	2.3	5.3%
<b>World Total</b>	<b>30.4</b>	<b>41.9</b>	<b>43.7</b>	<b>46.1</b>	<b>48.4</b>	<b>50.6</b>	<b>4.9%</b>

Source: Asahi Glass Co. Ltd.

Note: (\*) includes Russia; \*\*CAGR 2006-2010

## Automotive production outlook

	2001	2006	2007	2008	2009	2010	CAGR**
Japan	9.8	11.5	11.6	11.3	11.1	11	-1.1%
China	1.6	5.7	6.8	7.6	8.8	9.9	14.8%
Other Asia	5.4	8	8.5	9.7	10.5	11.3	9.0%
North America	15.5	15.3	15.1	14.4	14.6	14.9	-0.7%
South America	2.1	3	3.5	3.9	4.1	4.4	9.8%
West Europe	16.5	15.5	15.9	15.5	15.7	15.8	0.5%
C&E Europe (*)	2.6	4.9	5.7	6.4	7.1	7.6	11.5%
Other Regions	0.7	1.6	1.7	1.7	1.8	1.9	4.7%
<b>World Total</b>	<b>54.2</b>	<b>65.5</b>	<b>68.7</b>	<b>70.4</b>	<b>73.7</b>	<b>76.8</b>	<b>4.0%</b>

Source: Asahi Glass Co. Ltd.

Note: (\*) includes Russia; \*\*CAGR 2006-2010

## China becoming unviable in soda ash production

*Removal of export benefit, stringent environment control norms and rising freight will make China unviable for soda ash exports*

We expect that rising energy cost, environmental pressures, tightening credit and lending practices and upward revaluation in Yuan will put pressure on production cost of Chinese players. Also removal of 13% export tax rebate on Chinese exports in July 2007 has adversely affected Chinese exports. On demand front, China continues to see strong domestic demand growth geared by construction boom.

Few global research reports have mentioned that Chinese production of Soda ash may be adversely affected due to recent earthquake in China. We believe that it may further push soda ash prices in short run due to supply constraints.

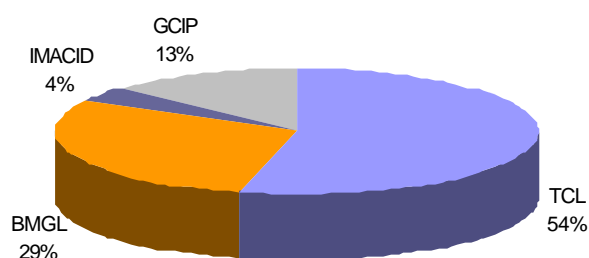
## Positive commentary by leading soda ash manufacturer and glass manufacturers

Presentations and earnings outlook shared by leading global players in soda ash and glass manufacturers has been encouraging in terms of soda ash pricing and demand outlook. Companies expect CY09 and CY10 to be attractive for earnings growth.

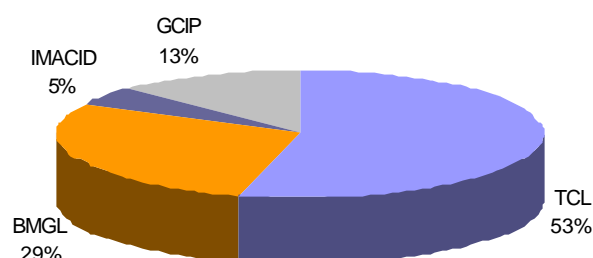
### Financials – 32% CAGR in PAT

We expect, TCL on consolidated basis to report CAGR (FY07-10E) of 19.8% in net revenues and achieve topline of ~ Rs 100 bn by FY10E from Rs 58 bn in FY07. We expect consolidated EBITDA margins to improve from 17.5% in 9MFY08 to 22.9% and further to 23.7% by FY09E and FY10E, respectively. Higher EBITDA margins at GCIP (approximately 35%) and rising soda ash prices are likely to drive consolidated EBITDA margins. Geared by margins expansion we expect EBITDA to grow at a CAGR of 32.8% from Rs 10.1 bn in FY07 to 23.7 bn by FY10E. We expect consolidated net profit growth at CAGR of 32.1% from Rs 5 bn to 11.7 bn. We expect EPS on fully diluted equity (Rs 2.44 bn) of Rs 40.9 and Rs 48.1 in FY09E and FY10E, respectively.

Revenue Breakup – FY09E

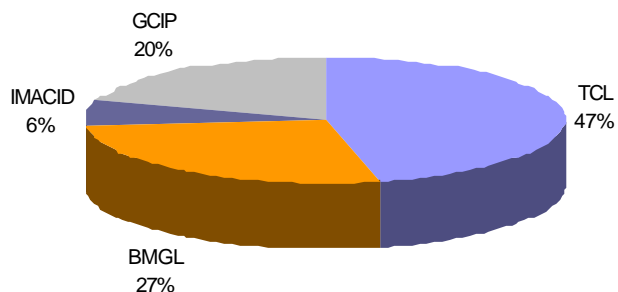


Revenue Breakup – FY10E

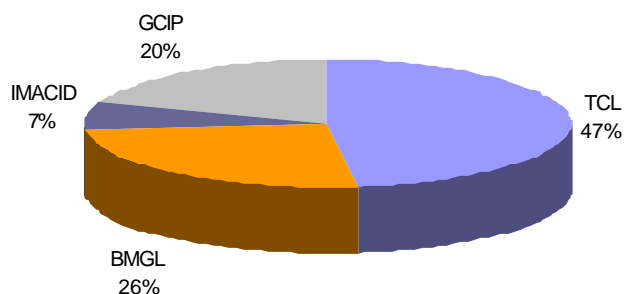


Source: Emkay Research

EBITDA Breakup – FY09E



EBITDA Breakup – FY10E



Source: Emkay Research



### Positive outlook on other businesses

We remain positive on TCL's other businesses like fertilizers, edible salt and cement and other chemicals. We expect margins of company's subsidiary IMACID to improve on account of sharp rally in phosphoric acid prices and revision of contractual prices with GoI to supply phosphoric acid. Our view on fertiliser (Urea and DAP) business remain firm in expectation of new fertiliser policies. Modernisation and expansion at its urea plant to increase capacity by 25% to 1.2 mn mt is on stream and is likely to complete by FY09. Tata salt continues to be market leader with 46%+ market share in iodised edible salt market.

### Reiterate – BUY with price target of Rs 529

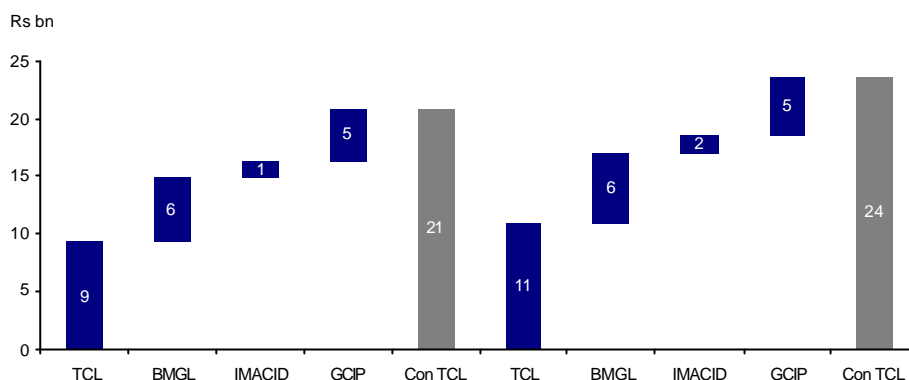
We are revising our price target from Rs 343 to Rs 529 due to rolling over to FY10E estimates from earlier FY09E base and also to factor – (1) Benefit of rising soda ash prices (2) benefit of rising phosphoric acid prices at IMACID and (3) Considering impact of recent acquisition of GCIP.

We are revising our earnings for FY08E and FY09E and also introducing our estimates for FY10E. We have revised downward FY08E AEPS by 16% to Rs 20.9 (previous Rs 24.7) and upward FY09E EPS by 31% to Rs 40.9 (previous Rs 31.2). We have also introduced our FY10E estimates for the company and expect consolidated EPS of Rs 48.1.

### Table of change in estimates

	Previous				Revised				Remarks
	Sales	EBITDA	PAT	EPS	Sales	EBITDA	PAT	EPS	
<b>FY08E</b>									
TCL - SA	44686	7546	4600		41586	7069	4521		Lower production volumes of soda ash and fertiliser sales
BMGL	19000	3040	1232		27164	2442	152		Lower than expected margins and late commissioning of Magadhi plant
IMACID	2480	400	176		3973	900	410		Better than expected due to sharp rise in phosphoric acid prices
GCIP	-	-	-		-	-	-		
Consolidated	66166	10986	6008	<b>24.7</b>	62616	10411	5082	<b>20.9</b>	
<b>FY09E</b>									
TCL - SA	46676	8515	5240		46474	9323	4744		Lower revenues from fertiliser business, lower other income
BMGL	22217	3999	1719		27164	5595	2221		Increase in soda ash prices
IMACID	3960	1188	636		3973	1279	669		Increase in phosphoric acid prices
GCIP	0	0	0		13184	4614	2320		Recently acquired
Consolidated	72853	13702	7594	<b>31.2</b>	90795	20812	9954	<b>40.9</b>	
<b>FY10E</b>									
TCL - SA	-	-	-		51518	10953	5630		Introducing
BMGL	-	-	-		29337	6113	2568		Introducing
IMACID	-	-	-		4767	1534	840		Introducing
GCIP	-	-	-		14238	5074	2678		Introducing
Consolidated	-	-	-		99861	23674	11717	<b>48.1</b>	

## Synthetic Soda Ash dominates the market



Source: Emkay Research

## Earnings sensitivity – EPS increases by Rs 5.5 by every US\$ 10 / mt increase in soda ash prices

Since soda ash now contributes approx 60% of TCL's net revenues and 64% of EBITDA, we have run a sensitivity analysis of TCL's earnings for change in soda ash prices. Our analysis shows that for every US\$ 10 /mt increase in soda ash prices, TCL's consolidated EPS will increase by Rs 5.5 per share assuming that price increase will be applicable to all its subsidiaries and there will be no incremental cost.

On cost front, we have also done sensitivity for key inputs of soda ash. We model that 10% increase in coal prices will lead to Rs 3.2 reduction in EPS. 10% rise in coke will lead to Rs 1.8, Natural gas Rs 1.4 and Limestone by Rs 0.6 Rs and industrial salt by Rs 1.3.

## Sensitivity - Soda Ash prices &amp; key raw materials

	Soda ash	Coal	Coke	NG	Lime stone	Salt
	US\$ / mt 10.0	10%	10%	10%	10%	10%
<b>PBT</b>						
FY09E	1856	-1087	-607	-468	-200	-452
FY10E	1890	-1183	-661	-492	-220	-498
<b>EPS</b>						
FY09E	5.5	-3.2	-1.8	-1.4	-0.6	-1.3
FY10E	5.6	-3.5	-2.0	-1.5	-0.6	-1.5

Source: Emkay Research

## Valuations

Our price target of Rs 529 is based on 11x FY10E estimated EPS of Rs 48.1. Historically company has been trading at 11-13 P/E multiple our valuations are based on conservative multiple. We believe that P/E method will be most appropriate way of valuing this company since soda ash now contributes approximately 60% of revenues and 64% of EBITDA. At our target price, stock trades at P/E of 12.9x and 11x FY09E and FY10E estimated earnings and EV/EBITDA of 8.7x and 7.6x, respectively.

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