

ASIAN SPECIALTY CHEMICALS NEWSLETTER

December 2011, ISSUE 69

A Quarterly newsletter of developments in the chemicals industry

We hope you find the Asian Specialty Chemicals Newsletter informative.

The chemical sector is consolidating fast. Its center of gravity is shifting to Asia, including the Middle East.

BDA is an investment banking firm which assists multinational clients to identify, assess and execute cross-border transactions involving Asia, including acquisitions, divestments, JVs, capital raising, and restructuring. We have offices and professional staff throughout Asia, the Middle East, the US, and Europe.

If you think that BDA's services may be useful to you, please contact us at any one of our offices or email me at erellie@bdallc.com. Contact details for our offices are at the back of this newsletter. We look forward to speaking with you.

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Australia



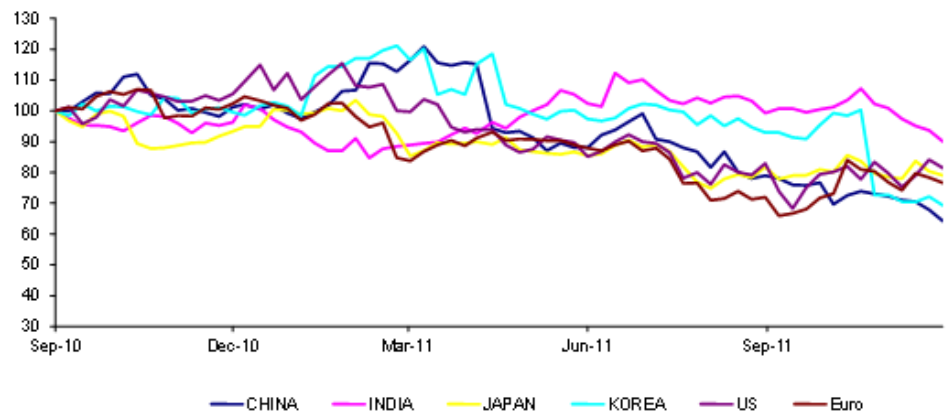
New Zealand



Penrice Soda Holdings, Australia's only manufacturer of soda ash and sodium bicarbonate, and **General Electric** have agreed with **QGC**, an Australian coal seam gas producer, to build and operate a brine pilot plant in Osborne. The plant will come on-stream in 2012. *October 28, 2011*

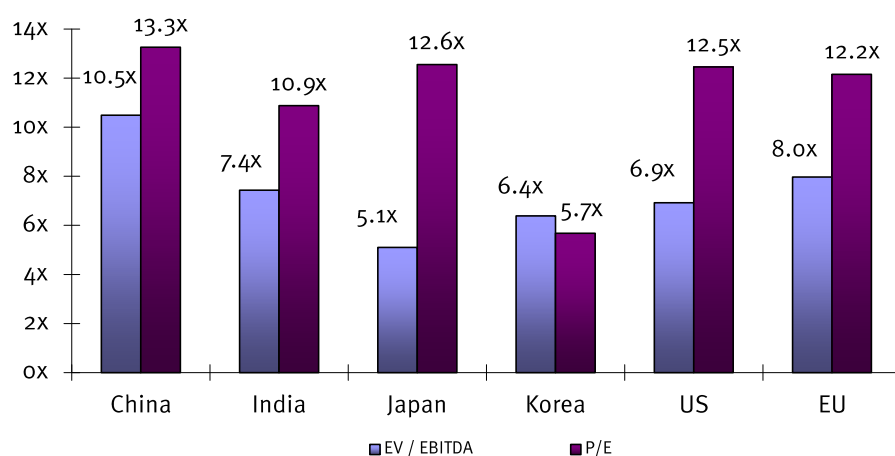
Tronox, a producer of titanium dioxide pigments, has agreed to acquire the Australian and South African sand mineral operations of **Exxaro Resources**, a South African producer of mineral sands and zircon, in exchange for 39% equity in Tronox. Tronox's capacity will increase to 465,000 mta of TiO₂ pigment and will be backward integrated with production capacity of 95,000 mta of natural rutile, 380,000

Specialty Chemicals Sector Stock Indices (12 months ending 19Dec11)



Source: Capital IQ, BDA

Specialty Chemical LTM Trading Multiples (19Dec11)



mta of slag and 220,000 mta of synthetic rutile. *September 26, 2011*

China



Adisseo, a French feed additives subsidiary of chemicals manufacturer **China National BlueStar** has acquired 90% of **Innov'ia**, a French design and toll manufacturer of powders and granules for the food and feed industry, pharmaceutical, cosmetic and fine chemical industries, for an undisclosed consideration. *September 27, 2011*

Air Products an industrial gases and chemicals company will build and operate an air separation unit (ASU) and integrated liquefier at the Nanjing Chemicals Industrial Park. The new ASU will produce 1,500 tons/day of gaseous oxygen and 19,000 tons/day of gaseous nitrogen. The liquefier will more than triple current production of liquid oxygen, liquid nitrogen, and argon production in the region. *September 26, 2011*

AkzoNobel, the Dutch specialty chemicals company, will invest US\$84m to increase capacity of its automotive and aerospace coatings business in China with a new production facility in Changzhou. The investment will increase capacity by 25m liters/year and will be operational early 2014. *October 27, 2011*

AkzoNobel will invest US\$61m to build a new dicumyl peroxide plant at the company's production site at Ningbo. The plant is expected to be completed by 2014. Capacity will expand by more than 30% to 25,000 mta. *November 18, 2011*

Arkema, a diversified chemicals manufacturer, will acquire Chinese companies **Hipro Polymers**, a producer of biosourced polyamide, and **Casda Biomaterials**, a manufacturer of sebacic acid (derived from castor oil used to manufacture polyamide), for US\$365m. The two companies are owned by a JV between **Arkema's Feixiang Chemicals** unit and private

equity firm **Bain Capital**.

November 21, 2011

BASF, the global chemical company, will build a new superabsorbent polymer (SAP) plant to expand its capacity by 60,000 mta. The new plant will be in Nanjing and run by **BASF-YPC**, a JV between **BASF** and **Sinopec**. **BASF** will also build a tert-butylamine production plant at Nanjing. It will be wholly-owned by **BASF** and will benefit from the integrated production system of **BASF-YPC Co**. Production is expected to begin in Q1 2013 and have a capacity of 10,000 mta. *October 24, 2011*

Cabot Corporation, a US based performance materials company, has opened a new 45,000 mta masterbatch plant in Tianjin. **Cabot** invested US\$20m in the plant, which is located within the carbon black JV facility of **Cabot** and **Shanghai Coking Chemical**, a Chinese chemical company. *September 19, 2011*

China Clean Energy, a producer of biodiesel fuel and environmentally-friendly specialty chemical products, has acquired **Handan Guanxin Technology**, a Hebei based feedstock provider, for US\$13m. *November 10, 2011*

CNPC, **Shell**, **Qatar Petroleum (QP)**, and the **Taizhou municipal government** will jointly build an integrated refinery and petrochemical complex at Taizhou. The project will refine imported condensate to produce ethylene and other petrochemicals. **Shell** and **QP** are expected to hold 25% each in the JV, and **PetroChina** will hold the remainder. *October 24, 2011*

DSM, a Dutch global life sciences and materials sciences company, has acquired 92% of **Shandong ICD High Performance Fibre**, a manufacturer of ultra-high molecular weight

polyethylene fiber, for an undisclosed consideration. *September 30, 2011*

DuPont Hongji Films Foshan (DPHJ), a JV between DuPont Teijin Films and FSPG Hi-Tech, will construct two polyester film production lines. The total investment will be US\$78m and will increase DPHJ's polyester film capacity at Foshan from 50,000 mta to 77,000 mta. *October 28, 2011*

Evonik Industries, a German specialty chemicals company, will build a hydrogen peroxide (H₂O₂) plant in Jilin Province, China for US\$133m. The plant will produce 230,000 mta of H₂O₂, increasing its current overall capacity by 40% to 600,000 mta. The plant is scheduled to be operational at the end of 2013. *October 7, 2011*

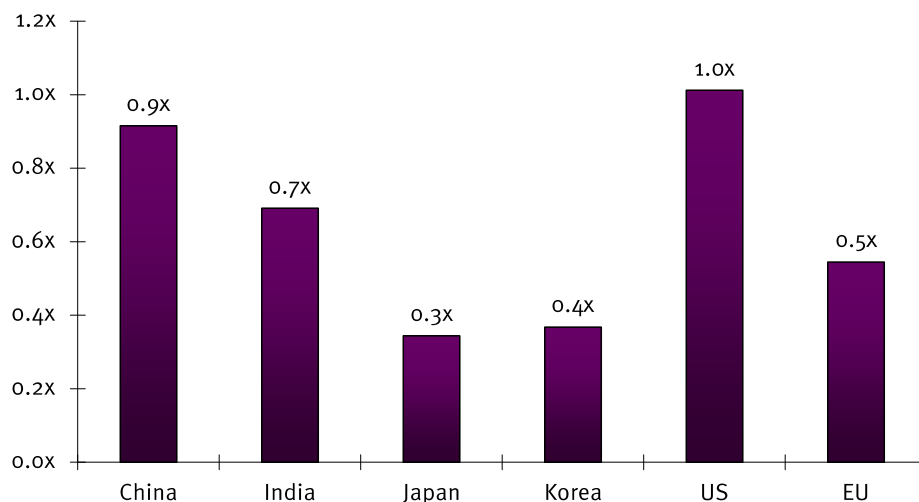
Global Sweeteners, a Hong Kong based producer of corn sweeteners, has agreed to acquire **Changchun Jincheng Corn Development**, a Chinese manufacturer of corn starch and related products, from investment holding company **Global Bio-Chem Technology Group** for US\$66m. *September 2, 2011*

Honeywell and **Sinochem** plan to establish a JV to produce and sell blowing agents for foam insulation in Taicang. The JV will produce HFC-245fa, a non-ozone-depleting rigid foam blowing agent used in insulation. Production is expected to begin late 2013. *October 12, 2011*

LDK Solar, the world's largest producer of solar wafers, will build a polycrystalline silicon manufacturing plant at Hohhot with a capacity of 30,000 mta. The plant will increase its polysilicon production capacity more than three-fold by 2013. *November 1, 2011*

Mitsubishi Chemical, a Japanese

Specialty Chemical LTM Price/Rev Ratios (19Dec11)



Source: Capital IQ

chemical company, will invest US\$33m in a plant to manufacture electrolytes for lithium-ion batteries in Changshu. Production will begin and have a capacity of 10,000 mta. *October 6, 2011*

Oxea, the world's second largest manufacturer of oxo intermediates and oxo derivatives, will build a oxo derivatives production plant in Nanjing. It is expected to be in operation in Q1 2013. *October 31, 2011*

Rhodia, the French chemical company, has commissioned three previously announced production units at its Zhenjiang site. One plant makes specialty surfactants and polymers, and the other plants make guaiacol and isobornyl cyclohexanol. *October 19, 2011*

Shandong Kingenta Ecological Engineering, a producer of fertilizer, and **Zhu Chongkun**, a Chinese private investor, have agreed to acquire 85% of **Yunnan Zhongzheng Chemical Industry Co**, a Chinese chemical company, from private investor **Luo Yun** for US\$12m. *October 20, 2011*

Suzhou Tianma Specialty Chemicals, a pharmaceuticals and specialty chemicals manufacturer, has agreed to acquire 52% of Chinese chemical products manufacturer **Shandong Tianan Chemicals** from **Suzhou Tianma Pharma Group**, a Chinese pharmaceutical intermediates and specialty chemicals producer, for US\$17m. *November 3, 2011*

India



Bharat Petroleum, an Indian oil marketing company, will invest US\$1bn to establish a petrochemical complex. The complex will produce petrochemical products and is part of a US\$8bn investment to expand activities. *September 22, 2011*

Private equity investor **Jacob Ballas Capital India** has acquired 13% of **Vivimed Labs Ltd**, an Indian manufacturer of specialty chemicals for the personal care industry, for US\$14m. *September 27, 2011*

Mitsubishi Heavy Industries and

Suhail Bahwan Group, a diversified family group in Oman, established a JV, **MHI Engineering and Industrial Projects (MEIP)**, for US\$20m. MEIP will construct chemical and environmental related plants. *September 6, 2011*

Japan

Ajinomoto, a Japanese food and chemical corporation, will expand its capacity for feed-use amino acids. Production capacity for L-lysine will increase by 150,000 mta, for L-threonine by 80,000 mta, and for L-tryptophan by 7,000 mta.

November 7, 2011

Asahi Kasei, a Japanese chemical and materials company, and **FDK Corp**, a Japanese electronic component and battery manufacturer, have established a JV for their combined lithium ion capacitors (LIC) business operations. The JV **Asahi Kasei FDK Energy Device** will produce LIC cell modules.

August 9, 2011

DIC Corp, a Japanese specialty chemical company, will invest US\$104m to build a new polyphenylene sulfide (PPS) polymer production line at its **DIC EP** subsidiary's production site. The new line will have a capacity of 5,500 mta, increasing DIC's global PPS polymer capacity to 19,000 mta. The project is expected to be completed in May 2013. *October 6, 2011*

Sumitomo Chemical, a Japanese chemical company, announced it will invest US\$52m to double production capacity of its facilities for compound semiconductor materials in Sodegaura, Japan. *October 11, 2011*

Korea

Akzo Nobel, a Dutch specialty chemicals company, has agreed to acquire **SSCP Co**, a Korean material and substance solutions provider for information technology products, for US\$50m. *September 9, 2011*

Curexo, a Korean medical equipment company, has agreed to acquire **Samyoung Systems Co**, a Korean synthetic resin and plastic material producer, for US\$10m.

October 12, 2011

Honam-Mitsubishi Rayon, a JV between **Mitsubishi Rayon** and **Honam Petrochemical**, will build a plant to produce 2-hydroxyethyl methacrylate, a raw material for paints and adhesives, in Seosan. The plant will have a capacity of 11,000 mta and will begin production in April 2013.

September 21, 2011

Linde Korea, a global gas and engineering company and member of the **Linde Group**, will construct a new nitrous oxide gas production plant in the Asian Industrial Complex for Foreign Companies in Asan. The plant is expected to come onstream by December 2012 and will have a capacity of 5,200 mta. Once completed, it will be the largest N₂o plant in Korea. Linde will also expand its air separation capacity via a 5,200mta plant in Giheung with a US\$180m investment. *October 26, 2011*

Malaysia

Yule Catto, a UK chemicals company, has acquired **Quality Polymer**, a producer of aqueous polymers, from **Nippon Paint Malaysia**, a paint and paint products manufacturing company, for US\$13m.

October 17, 2011

Saudi Arabia

Air Products has agreed to acquire 25% of **Abdullah Hashim Industrial Gases & Equipment**, the largest privately held industrial gases company in Saudi Arabia. The terms of the deal were not disclosed.

October 6, 2011

PolyOne, a global provider of specialized polymer materials, has formed a JV with **Juffali & Brothers**, a Saudi manufacturing, engineering, construction, distribution and service company. The JV will build a US\$14m specialty color concentrates plant in Jeddah that is expected to come on-stream in Q4 2012. *October 17, 2011*

Thailand

SCG Chemicals, a Thai petrochemical company, has acquired 30% of listed Indonesian petrochemical company **PT Chandra Asri Petrochemical Tbk** from **PT Barito Pacific TBK**, an Indonesian peer, and **Temasek Holdings Pte Ltd**, a Singapore based state-owned investment company, for US\$428m. *September 19, 2011*

PTT Global, Thailand's largest integrated petrochemical and refining company, has agreed to acquire 51% of Chinese specialty chemicals company **Perstorp's** isocyanates business for US\$153m. *September 19, 2011*

Asian Specialty Chemicals Transactions with Multiples (12 months ending in 20Dec2011)

Announce Date	Target Name	Target Country	Acquirer Name	Acquirer Country	Deal Value	Percentage Acquired	EV / EBITDA	EV / Revenue	P/E
28-Oct-11	CHT Holdings	China	Shaw Kwei & Partners	Hong Kong	\$128.0	100%	32.8x	2.7x	-
09-Aug-11	Higashiyama Film	Japan	CITIC Capital	Japan	\$17.3	37%	6.5x	.9x	-
14-Jul-11	Mando	Korea	E-Polymers	Korea	\$9.6	43%	-	.6x	-
30-Jun-11	Akzo Nobel	Netherlands	SSCP	Korea	\$237.1	100%	13.8x	1.3x	15.9x
01-Jun-11	Sabero Organics Gujarat	India	Coromandel Int'l	India	\$37.5	31%	13.7x	1.3x	16.5x
10-May-11	SDS Biotech	Japan	Idemitsu Kosan	Japan	\$146.1	70%	7.7x	1.2x	8.x
21-Mar-11	KSCB Co	Korea	GemVax & KAEL	Korea	\$6.5	18%	47.5x	1.6x	44.9x
15-Dec-10	PT Sorini Agro Asia Corporindo	Indonesia	Cargill	US	\$393.2	85%	15.2x	2.3x	31.9x
				Median	\$82.8	56.5%	13.8x	1.3x	16.5x

Source: Capital IQ

The stock indices and trading multiples graphs shown in this newsletter represent the ten largest publicly traded specialty chemicals products companies in Asia.

Business Development Asia is an investment banking firm which assists multinational companies in expanding their businesses in Asia through acquisitions, divestments and capital raising. For further information on BDA's services or on any of the articles in this newsletter, please contact the offices listed.

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