

ASIAN SPECIALTY CHEMICALS NEWSLETTER

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INTRODUCTION

We hope you find the *Asian Specialty Chemicals Newsletter* informative.

BDA is a corporate finance and advisory firm, which assists multinational clients to identify, assess and execute cross-border transactions involving Asia, including acquisitions, divestments, JVs and restructuring. We have offices and professional staff throughout Asia, and in 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 in the future.

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China

Akzo Nobel's Surfactants business formed a strategic alliance with **Feixiang Chemicals (Zhangjiagang)**, China's leading specialty surfactants supplier. Based in Jiangsu Province, **Feixiang Chemicals** manufactures a range of fatty amine and surfactant products with a capacity of 80,000tpa. The 50/50 JV expects to generate substantial additional sales in mainland China. **Akzo Nobel** will be the exclusive distributor for most of **Feixiang Chemicals'** specialty surfactants outside of China. (August 14, 2006)

Akzo Nobel has gained full control of its Asian **Akzo Nobel Chang Cheng Coatings JV** after acquiring the remaining shares (16.66%) from its main partner **Chang Cheng Securities**. **Akzo Nobel** now wholly owns its powder coatings operations in China, Taiwan and Hong Kong. The transaction involves a total of six sites, four of which are located in China. (June 5, 2006)

Asahi Kasei and **Dow Chemical** have concluded an agreement for the transfer to **Dow** of the **AKCC** shareholdings in their JV companies **Styron Asia Ltd.** in Hong Kong and **SAL Petrochemical** in China. **Styron Asia** was established in 1994 to build a new base and network for polystyrene supply in Asia and **SAL Petrochemical** in 1998. (Aug 11, 2006)

BASF and **SINOPEC** signed a US\$500m agreement to expand their 50/50 JV, **BASF-YPC Co.**, in Nanjing. Investments will cover: 1) expansion of steam cracker from 600,000tpa 750,000tpa of ethylene; 2) expansion of the ethylene oxide (EO) plant and development of EO derivatives to

strengthen the ethylene value chain producing non ionic surfactants for detergents and the solvent butylglycol ether; 3) development of the C4 value chain including C4-specialties: Butadiene and isobutene as chemical raw materials, 2-propylheptanol for a new generation plasticizer and polyisobutene derivatives as fuel and lubricant additives; 4) extension of the acrylics value chain to produce super absorbent polymers for hygiene and industrial applications. The new activities are expected to come onstream in 2009. (July 10, 2006)

Cabot Corporation announced the start-up of China's first world-class fumed silica manufacturing facility located in Jiangxi Province, China. The facility is a project of **Cabot Bluestar Chemical (Jiangxi)**, a JV between a Cabot subsidiary, **Cabot (China) Limited**, and **Bluestar New Chemical Materials**, a member of the **ChemChina Group**. **Cabot Bluestar Chemical (Jiangxi)** invested US\$27m to construct the plant with capacity of 4,800tpa. (August 16, 2006)

Cabot Corporation announced the start-up of its new carbon black facility located in Tianjin, China. **Cabot Chemical (Tianjin)** is an equity JV between a Cabot subsidiary, **Cabot (China) Limited**, and **Shanghai Coking Chemical Co**, a member of the **Huayi Group**. **Cabot Chemical (Tianjin)** invested US\$60m to construct the plant with capacity of 105,000tpa. The new facility includes two production units that use the latest Cabot technology incorporating advanced environmental systems for both energy recovery and flue gas desulphurization. Both units are operating at full capacity. (August 28, 2006)

Ciba Specialty Chemicals will collaborate with **Jiangsu Feiya Chemical Co** to construct a state-of-the-art alkylated diphenyl amines plant near Shanghai, China. **Jiangsu Feiya** will construct the facility using **Ciba's** proprietary process technology. **Ciba** will exclusively market all products manufactured. The plant is expected to commence production in Q4 2006. (July 3, 2006)

Clariant and **Hangzhou Baihe Chemical's** new high performance pigments JV facility for the production of in Hangzhou came on-stream. The facility will supply the market with red and yellow

pigments. Marketing and distribution of the products by the JV will occur via **Clariant's** global network. **Hangzhou Baihe Chemical** is a manufacturer of organic pigments with annual turnover of US\$720m. (July 10, 2006)

Cytec Industries announced its plans for a new production unit to manufacture epoxy and urethane acrylates at the company's Fengxian site production facility near Shanghai, China. Current plans are for the plant to come on stream during H1 2008. (July 17, 2006)

Degussa AG started up its new polyesters and colorants plants at its multi-user site (MUSC), located in Shanghai Chemical Industry Park (SCIP). The investments are pooled in **Degussa Specialty Chemicals (Shanghai)**, a subsidiary of **Degussa's** Chinese holding **Degussa (China) Co**. The polyesters and colorants plants of the Coatings & Colorants Business Unit are the first projects at this site. The coating polyesters of the Polyesters & Adhesive Resins Business Line are used mainly in coil and can coating systems. For both in-plant and POS, the Colorants Business Line produces and develops pigment pastes and color tinting systems that are sold into the paints, coatings, and related industries. (June 19, 2006)

Dow Epoxy announced plans to invest US\$200m over the next five years in manufacturing and R&D facilities in China. **Dow Epoxy** plans to build a 100,000tpa liquid epoxy resins plant at its existing site in Zhangjiagang, and a 150,000tpa epichlorohydrin plant in China. The units are expected to start up in 2009-2010. **Dow Epoxy** also plans to expand the capacity of its converted epoxy resins plant in Zhangjiagang from its current 41,000tpa to 75,000tpa. (August 17, 2006)

DSM opened its new feed premix plant in Liaocheng in Shandong, China. It aims to provide animal nutrition vitamin and mineral premixes with advanced formulas to feed customers in North and North East China. The Liaocheng plant will produce 15,000tpa of vitamins and mineral premixes. It is the company's second feed premix facility in China after the **DSM Vitamins (Shanghai) Limited** feed premix plant. (August 22, 2006)

Fortune Industries announced that **Nor-Cote International**, a wholly-owned subsidiary, is expanding operations in China and Singapore. **Nor-Cote** is a manufacturer of ultraviolet curable screen printing inks. Expansion efforts include additional production and R&D capabilities at the Singapore facility, including printing of UV inks, color-matching and substrate testing capabilities. In August 2006, **Fortune Industries** announced that **Nor-Cote** entered into a licensing agreement for its products with **Mino International**, a Japanese manufacturer in the field of conventional solvent based screen printing inks. (August 21, 2006)

Hercules Tianpu Chemicals commissioned a 6,000tpa methylcellulose plant in Zhangjiagang, China. The company is a JV between **Aqualon**, a division of **Hercules**, **Luzhou North Chemical Industries** and **Jiangsu Feixiang Chemicals**. (June 30, 2006)

Huntsman, **BASF** and Chinese partners - **Shanghai Hua Yi (Group Company)**, **Sinopec Shanghai Gao Qiao Petrochemical Corporation** and **Shanghai Chlor-Alkali Chemical Co** – celebrated the opening of their integrated isocyanates complex at the Shanghai Chemical Industry Park, China. The project involved a total capital expenditure of US\$1bn. The complex has a capacity of 240,000tpa of crude MDI (diphenylmethane diisocyanate), the primary precursor for polyurethanes products. (August 9, 2006)

Invista will build an 11,000tpa nylon 6.6 yarn facility in Shanghai. The construction work is expected to begin in Q4 2006, and commercial production is planned for Q1 2008. The plant will use the same technology as **Invista's** facilities in the UK and Canada. It will produce super-high-tenacity yarns for use in industrial textile applications, with a focus on the automotive industry. **Invista** is planning to make the full range of materials for airbags and claims to be the only company with such capability in Europe, North America and Asia. (July 10, 2006)

Kawasaki Sanko Kasei and **Kuraray** will jointly establish a 10,000tpa resin compound in Zhongshan, Guangdong Province, China. **KSK** and

Kuraray already have a new JV, established in the development zone of Zhongshan in April 26, 2006. Operation is planned to commence in Q1 2007. (August 10, 2006)

Kuibyshevazot has begun building its delayed US\$9m JV engineering plastics plant in Qingpu, Shanghai. The 9,900tpa facility is now scheduled to begin commercial production in early 2007. Plans to double the capacity are under consideration. Germany's **Berstorff** will supply the plant equipment, with installation set to begin in November. **Kuibyshevazot Engineering Plastics** is a JV with the Chinese chemicals distributor **He Yo Trading**. The Russian fertilizer and caprolactam producer holds a 51% stake. (July 31, 2006)

Kiwa Bio-Tech Products Group Corporation and **Kiwa** and **Tianjin Challenge Feed Co** have registered a JV. The new company, **Tianjin Kiwa Feed Limited Liability Company**, is located in Wuqing District in Tianjin, and will be operated through a jointly-owned LLC. The new company has begun to sell Kiwa Bio-feed developed by both **Kiwa** and **Tianjin Challenge**, and the 1st phase production of AF-01 Anti-viral Aerosol Agent for use as a preventative for Avian Flu. Initial sales are expected in North China by relying on the existing **Tianjin Challenge** sales network. (July 26, 2006)

Kumho Petrochemical and China's **Jiangsu GPRO Group** have signed a MOU to jointly invest in a US\$100m project in Nanjing, Jiangsu province, China. Three units will be built to produce 80,000tpa of propylene oxide, 50,000 tpa of polyether polyols and 100,000tpa of caustic soda. Building will start in Q3 2006. The project is planned to start up in 2008. (July 31, 2006)

Nova Chemicals has commissioned a plant for Arcel PS-PE foam in Ningbo, China. The plant is a JV with **Loyal Chemical**, and supplies mouldable packaging material. (July 24, 2006)

Solvay will build a polytetrafluoroethylene (PTFE) micronised powder production unit near Shanghai. Due onstream in H2 2007, the plant will be built at the Jiangsu fluorochemical industrial park in Changshu, and will serve the fast-growing local

demand for high-performance materials. **Solvay**, which markets PTFE micronised powders under the Polymist brand, will not disclose the investment cost or the proposed capacity of the new plant. It will, however, be solely owned by **Solvay**. (July 10, 2006)

U-Pica and Taiwan's **Chang Chun Plastics** have agreed to establish a JV in China this October for the production and sales of unsaturated polyester resin. **U-Pica (Changshu) Co.** will be capitalized at US\$7.6m, with **Japan U-Pica** contributing 51% and **Chang Chun Plastics** 49%. Production is scheduled to start at the Changshu Industrial Park in Q4 2007, targeting sales of about US\$20m 2012. (July 27, 2006)

Valspar Corporation has completed its previously announced investment in the **Chinese Huarun Paints Holdings Company Limited**. **Valspar** acquired an 80% interest in **Huarun Paints** from **Champion Regal Limited**, a Hong Kong based investment company, and other shareholders. **Huarun Paints** is China's leading domestic suppliers of wood and furniture coatings and a rapidly growing supplier of architectural coatings. **Huarun Paints** sells its products primarily through an extensive network of distributors and retail paint stores throughout China. The company achieved sales of approx. \$180m in 2005. (July 31, 2006)

Wacker and **Dow Corning** have obtained approval from the Chinese government to erect a siloxane production plant. The JV **Dow Corning (Zhangjiagang)** will produce silicone intermediates. **Dow Corning** will be responsible for erecting and expanding joint siloxane production; **Wacker** will be responsible for the fumed silica plant that is under construction. (August 9, 2006)

cosmetics. **Virchow** will produce the ingredient at its facility in Hyderabad with technology from **Ciba Speciality**. (June 15, 2006)

Kemrock Industries and Exports Ltd (Kemrock) of Gujarat has formed a JV, **Georgia-Pacific Kemrock International Pvt**, with **Georgia Pacific Resins Inc**, a subsidiary of the Atlanta-based **Georgia-Pacific Corp**. The JV will offer thermosetting resins to several industrial markets in India, Bangladesh, Sri Lanka, Bahrain, Saudi Arabia, Kuwait and the UAE. The JV will also offer non-phenolic resins like polyesters, vinyl esters and epoxies manufactured by **Kemrock**. The American partner will license its phenolic acid resin technology to **Kemrock** for the composites, coated abrasives and foundry markets. An investment of INR400m (US\$8.7m) will be made by the JV towards expansions. (August 6, 2006)

Nippon Paint, which launched its India operations from Chennai in July, will go pan-India starting up manufacturing facilities in Q1 2008. The company will build two manufacturing facilities, one each in Gurgaon and Chennai, early in 2008, spending EUR32m on the facilities, each having a capacity of 20,000tpa - expandable to 40,000tpa. India's paint market is approximately EUR1.8bn. While the organized market comprised 70% of the total paint market, decoratives held a maximum share of 75% (EUR945m). The company will first offer products in the decorative range, but will soon introduce other products as well. (August 28, 2006)

Oil and Natural Gas Corp (ONGC) has approved an INR136bn (US\$2.9bn) petrochemical complex at Dahej in Gujarat, India, which will start up in H2 2010. The complex will be integrated with **ONGC's** forthcoming gas processing unit at Dahej, which will supply ethane and propane as feedstock to the 1.1m tpa dual-feed cracker. It will also get naphtha as feedstock from **ONGC's** existing gas processing complexes at Hazira in Gujarat and at Uran in Maharashtra. Downstream units will produce high-

India

Ciba Speciality Chemicals (India) Ltd has entered into an agreement with the **Virchow group** to set up a JV to produce an anti-microbial agent, triclosan, used in toothpaste, soaps and

To submit stories to the *Asian Specialty Chemicals* Newsletter, please contact Meng Jiang in Shanghai at (8621) 5407-5580 or email mjiang@bdallc.com.

density polyethylene (PE), linear low-density PE, polypropylene and styrene butadiene rubber. (August 14, 2006)

Japan

Garlock Sealing Technologies, a subsidiary of **EnPro Industries Inc.**, and **Nippon Valqua Industries**, an industrial packing and gaskets manufacturer headquartered in Japan have formed a JV, **Garlock Valqua Japan**, to market high performance metal seals to research, automobile, semiconductor, nuclear and energy industries located in Asia. The seals will be manufactured by **Garlock** in South Carolina and France. The new company will be headquartered in Tokyo and is expected to begin operations in Q3 2006. Since 2003, **Garlock** and **Valqua** have participated in a strategic alliance for reciprocal product supply, optimization of manufacturing and sourcing, and collaboration in new product development. (June 15, 2006)

Kuraray has announced its decision to expand production of optical-use poval film, which serves as a base ingredient for polarized film, an essential component of liquid crystal displays (LCDs). Kuraray plans to add 30m m² to its annual poval film production capacity by June 2007, for a total capacity of 121m m² per year. (August 10, 2006)

Kuraray Medical and **Asahi Kasei Medical** will form a 50/50 JV, **A-K Membrane Manufacturing Co.**, to manufacture hollow-fiber membranes for medical applications that employ ethylene vinyl alcohol polymer (EVOH) resin that is manufactured and sold by **Kuraray** under the EVAL brand name. The JV will eventually produce membranes for 4m dialyzers/year (initially 2.6m dialyzers/year) starting in Q2 2008. (June 20, 2006)

Rohm and Haas has reached an agreement to sell its global Automotive Coatings business to **Nippon Paint Co.** Terms of the sale include

US\$230m in cash subject to adjustments at closing. The company does not expect a significant gain or loss from this transaction. The transaction is expected to close in October 2006. The sale involves the company's North American Automotive Coatings business (United States, Canada and Mexico) including the company's facilities based in Lansing, Illinois as well as its interests in two JVs with **NPC**. The transaction does not include **Rohm and Haas'** European Automotive Coatings business. Rohm and Haas also intends to divest that portion of the business and is actively pursuing potential buyers. (August 7, 2006)

Kemira's paints subsidiary **Tikkurila** recently announced the creation of a 50/50 JV with Russian company **STO**. **Sto-Tikkurila** will make architectural paints for facades. In Feb 2006 **Tikkurila** acquired Russian company **Kraski**. (June 19, 2006)

Korea

The South Korean government has approved a 50/50 MMA JV between **Honam Petrochemical** and **Mitsubishi Rayon**. **Daesan MMA** plans to start operating a 40,000tpa PMMA plant by H2 2008 and a 90,000tpa MMA plant by Q4 2008. This would be the second MMA facility for **Honam**, which also has a 50,000tpa unit at Yeochun. Outside Japan, **Mitsubishi Rayon** has a 40,000tpa PMMA plant in Nantong, China, and a 90,000tpa MMA unit at Map Ta Phut, Thailand. **Mitsubishi Rayon** is also building a 90,000tpa MMA facility at Huizhou, Guangdong province, China. (June 19, 2006)

PPG acquired the 50% shares in **Dongju Industrial** that it did not already own for an undisclosed sum. **Dongju** specializes in paints for the automobile, industrial and packaging sectors. It has factories in Chon Ahn and Pusan. PPG's president has confirmed that the company will make further investments in paints and coatings over the next year. (July 10, 2006)

Taiwan

DuPont Electronic Technologies has established a Semiconductor Materials Technical Center in Taiwan's **Hsinchu Science Park**. The Semiconductor Materials Technical Center is

DuPont Taiwan Technical Center's third facility in Taiwan. The facility includes single wafer processing capability, advanced analytical and metrology tools, and is staffed with top researchers in the field of semiconductor process technology. DuPont also has semiconductor materials research facilities in the United States, Europe, and Japan. (July 24, 2006)

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ABOUT BDA

Business Development Asia is a corporate finance advisory firm which assists multinational companies in expanding their businesses in Asia through JVs, acquisitions and divestments. For further information on BDA's services or on any of the articles in this newsletter, please contact the offices below.

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