

ASIAN SPECIALTY CHEMICALS NEWSLETTER

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INTRODUCTION

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

BDA is a corporate finance advisory firm which helps multinational companies to identify and execute acquisitions, JVs and divestments in Asia. We focus on the specialty chemicals sector and are well placed to assist our clients.

If you think that BDA's services may be useful to you, please contact us in New York at (212) 265-5300 or in Singapore at (65) 533-8500.

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Managing Director

CHINA/HK

Asahi Kasei Corp of Japan and the Chinese subsidiary of **DuPont Co** will build a resin plant in China. The two companies will establish a production and sales JV in July 2002, and will build a plant in the eastern province of Jiangsu to produce acetal copolymer resins (POM). The plant will start production in Q2 2004 with an initial capacity of 20,000tpa, rising to 60,000tpa. The total investment in the venture is US\$75 million. China is the world's fastest-growing POM market, currently estimated at over 100,000tpa. The JV will sell 70% of its products within China, where the market for POMs is expected to rise at 8% annually. (March 26, 2002)

Hangzhou Asahikasei Spandex Co, a new subsidiary of **Asahi Kasei** of Japan, will establish a 5,000tpa polyurethane (PU) elastic fiber plant in the Hangzhou Economic and Technological Development Zone in Hangzhou, China. The new company will have a paid-up capital of US\$10m and will begin production in Q2 2003. (February 21, 2002)

Mitsubishi Rayon Co and **Daiki Co**, both of Japan, will establish a plant in China to produce membranes used for water treatment. The JV will be set up in Dalian, with Mitsubishi Rayon holding a 51% stake and Daiki the other 49%. The amount to be invested is US\$900,000. (March 13, 2002)

Japanese companies **Polyplastics Co**, **Mitsubishi Gas Chemical Co** and **Ticon** have formed a JV with the technical polymers division of German firm **Celanese** in China. **PTM Engineering Plastics (Nantong) Co**. The JV will manufacture Polyacetal

resin, extensively used in the automotive industry, in a 60,000tpa facility. Acetal copolymer, also to be produced in the new plant, is a polyoxymethylene (POM) of high crystallinity, delivering high strength, stiffness, toughness and lubricity over a broad range of temperatures and chemical environments. (February 4, 2002)

Sino French Water Development has formed a subsidiary with **Ondeo** of France, **New World Group** of Hong Kong, and the **Shanghai Chemical Industrial Park**. **Ondeo Industrial Solutions**, a wholly owned Ondeo subsidiary, will be responsible for designing, financing and managing water treatment installations and services for the park's industrial effluents. The contract duration is 50 years and will generate revenue of US\$529. Total investment is US\$44m for an effluent treatment volume of 50,000 m³/day. Currently covering the treatment of all wastewater from the industrial site, the contract may be extended to the management of the complete water cycle and solid waste. Ondeo has a leading position and presence in China where it currently manages 10 long-term water contracts and 20 water treatment facilities in China. (March 20, 2002)

Tosoh of Japan will set up a plant to produce PVC resins. The ¥5bn (US\$40m) facility will produce 100,000tpa. Tosoh will be the first major Japanese chemical firm to mass-produce PVC resins in China. The plant will be built near Shanghai by 2004. (January 21, 2002)

INDIA

Ashland Specialty Chemicals of the US paid Rup16m (US\$329,218) to **Chembond** of India for the transfer of its water treatment assets to a JV between the two companies called **Chembond DREWtreat**. In October 2001, Chembond acquired a 55% stake in Ashland's Indian affiliate **DREWtreat Chemicals** for Rup17m (US\$349,794). It had acquired the stake previously owned by **Goodlas Nerolac Paints**, the Indian arm of **Kansai Paints** of Japan. Chembond DREWtreat is now the third largest water treatment company in the Indian

market with an 18% market share. The JV company expects revenues of Rs250m (US\$5m) in the first year of operation. (February 15, 2002)

DSM Engineering Plastics Pvt Ltd, a 100% subsidiary of **DSM Netherlands**, will shift production of some DSM products to India from China and Europe. It will initially set up a computer aided design center to support the global design and engineering requirements of DSM Netherlands. DSM will launch Stanyl and Arnitel, two high performance plastic materials, in the Indian market. The company also plans to introduce DSM's range of halogen and cadmium-free materials. (March 7, 2002)

ICI Ltd of India, a subsidiary of **ICI plc**, has sold its 50% stake in the JV **Berger Auto and Industrial Coatings Ltd**, to its partner **Berger Paints India Ltd**. ICI is exiting non-core businesses and focusing on decorative paints, catalysts for fertilizer and refinery sectors, adhesives, starch, flavors and fragrances. The Company has already exited pharmaceutical, explosives and polyurethane businesses. (February 28, 2002)

Reliance Industries Ltd (RIL) of India will expand into the overseas market for the first time. The company has an office in China and is planning to open offices in Vietnam and the United Arab Emirates. The move is in response to the Indian governments announcement to reduced import duty on polymers from 35% to 30% and eventually to 20% by 2004. (March 11, 2002)

Rohm and Haas of the US is investing US\$20m to build a manufacturing facility in Mumbai to produce both emulsion polymers and adhesives to supply the domestic market and serve export needs elsewhere in the Asia-Pacific region. The coatings business makes intermediate products and additives that are used in latex paints, textile and paper finishes. The adhesives and sealants business makes products that are used in flexible packaging, building materials, and tape and label applications. (March 11, 2002)

SNF India, a 100 % subsidiary of **SNF Floerger** of France, has built a new manufacturing base at Visakhapatnam, with a production capacity of 10,000tpa of powder polyacrylamide. The company

is capitalizing on the business potential for water treatment products in the refinery, farm sector and municipal water treatment facilities. (February 22, 2002)

INDONESIA

Marubeni Corp of Japan has signed an agreement with the **Indonesian Bank Restructuring Agency (IBRA)** for a debt-restructuring plan for their troubled Indonesian petrochemical JV, **PT Chandra Asri Petrochemical Center**. This is the final deal of an accord made last October between Marubeni and the IBRA regarding the rescue package for the Indonesian firm. The final package includes a debt-for-equity swap and a reduction in interest rates. Of the US\$780m in loans that Chandra Asri owes Marubeni, US\$150m will be swapped into equity, and US\$440m of US\$540m owed to the IBRA will be converted into equity. Chandra Asri's remaining US\$630m and US\$100m in loans owed to Marubeni and the IBRA, respectively, will be repaid over 15 years. The resulting structure will give Marubeni with a 20% stake and the IBRA with the remaining 80%. (March 6, 2002)

JAPAN

Asahi Kasei of Japan will expand its 15,000tpa polymethyl methacrylate (PMMA) plant in Chiba prefecture, by 5,000tpa. The additional volume will be targeted at the fast-growing liquid crystal display market. (February 21, 2002)

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Air Products and Chemicals, Inc of the US has signed a 10-year supply agreement with **Nippon Helium, Inc** of Japan, its exclusive distributor of helium in Japan, to serve the product requirements of customers in the magnetic resonance imaging, semiconductor, fiber optics, welding, analytical and other markets. A JV between **Air Water Inc** and **Mitsui and Company, Ltd, Nippon Helium** has purchased gaseous and liquid bulk helium from Air Products for resale to Japanese customers since 1969. The latest supply agreement is valued at US\$150m. (March 12, 2002)

Daiso Co of Japan is doubling production capacity for silane coupling agents to 2,000tpa. The expansion at Daiso's tire additives plant at Amagasaki will begin production in April 2002. (February 3, 2002)

Dainippon Ink and Chemicals (DIC) of Japan and materials integrity management firm **Entegris** of the US have formed a licensing partnership that provides the Japanese market with increased access to Entegris technology. Under the agreement, DIC will be licensed to make, use and sell integrated circuit (IC) trays, employing Entegris' patented design. DIC will have sublicense rights throughout Asia-Pacific and a non-exclusive license to make, use and sell the licensed trays throughout the rest of the world. (February 20, 2002)

Hodogaya Chemical Co of Japan has exited the general-use chemicals business in response to cheaper imports of chloralkali, a material for caustic soda, and benzene chloride, used for mothballs. The company will concentrate on specialty chemicals operations, such as data storage materials and resin materials. The company will cancel an existing contract with **Kureha Chemical Industry Co** of Japan for joint production of chloralkali products. Hodogaya Chemical is selling its stake in a JV with Kureha Chemical for benzene chloride production to Kureha Chemical. (February 21, 2002)

Mitsubishi Chemical Corp and **Mitsubishi Pharma Corp** both of Japan will integrate their businesses in active pharmaceutical ingredients (APIs). The companies will divest Mitsubishi Chemical's fine chemical operations and integrate it, by October 2002, with those of **Yoshitomi Fine**

Chemicals Ltd of Japan, a subsidiary of Mitsubishi Pharma. Mitsubishi Chemical has expertise in research and development in the API business and its fine chemicals business sells various intermediate chemicals such as materials used in perfumes. Yoshitomi Fine Chemicals has expertise in specialty chemicals particularly plastic additives and sterilizers, and has built a multipurpose facility to produce APIs. (March 12, 2002)

Nippon Carbon Co and **Nippon Steel Chemical Co** both of Japan will integrate their special carbon products operations under a 50/50 JV to be set up in Q1 2003. The integration will increase efficiency and help overcome a slowdown in demand for special carbon products used in semiconductors, telecommunication equipment and electric machinery. (March 11, 2002)

Sankyo Co Ltd of Japan will divest its agricultural and specialty chemicals operations by April 2003. The company will turn the two divisions into in-house companies with independent books. Sankyo will then outsource production, with the new subsidiaries focusing on R&D and the marketing of agrochemicals and specialty chemicals. Sankyo is also closing its agrochemicals plant in Yasu, Shiga Prefecture, by March 2003. (March 21, 2002)

Shin-Etsu Chemical Co of Japan will sell its fertilizer business to **Co-Op Chemical Co**, also of Japan, on June 30, 2002 to concentrate its resources on silicon wafer and resins operations. In addition Shin-Etsu Kasei will continue its other businesses producing acetylene used for welding. (March 12, 2002)

Teijin of Japan is selling its 20,000tpa acetic anhydride plant in Matsuyama, Japan, to **Daicel Chemicals**, also of Japan. Daicel is seeking to strengthen its acetic acid derivatives business and currently operates a 36,000tpa acetic acid plant in Ohtake. Its affiliate **Kyodo Sakusan** of Japan operates a 420,000tpa plant in the Hyogo prefecture. Teijin is withdrawing from the acetate business and is building a synthetic films plant for use in the production of semiconductors and other high technology products. (February 22, 2002)

KOREA

Daelim Industrial of Korea is transferring its 400,000tpa high-density polyethylene (hdPE) plant to its polypropylene (PP) JV, **PolyMirare**, ahead of the sale of its 50% share in PolyMirae. In addition, Daelim has sold its 40,000tpa plastic processing plant and 30,000tpa polybutane facility to a Korean chemical trading company. (February 21, 2002)

LG Chemical Co of Korea is expanding its production line for polarizer, a substance used for the production of thin film transistor-liquid crystal displays (TFT-LCDs). LG Chemical will add a third polarizer production line with an annual capacity of 3 million sq. meters by Q4 2002 at a cost of W34bn (US\$25m). LG Chemical is also seeking to build a fourth line either in Korea or overseas, especially China and Taiwan, to expand its total production capacity to 10 million sq. meters. (March 13, 2002)

MALAYSIA

UCB group of Belgium has moved its Asia-Pacific office from Singapore to Menara Lien Hoe, Malaysia, and will invest another RM35m (US\$9m) in the country for the next few years. The UCB group is involved in the pharmaceuticals, chemicals and photographic film sectors. The company's chemicals division produces Radcure resins for industrial coatings. The plastics division produces bi-axially oriented polypropylene used in specialist applications such as labels, over-wrapping, security films and cellophane. (February 26, 2002)

SINGAPORE

Dainippon Ink and Chemical of Japan has established a wholly-owned alkyphenol subsidiary, **DIC Alkyphenol Singapore**, which will operate a 16,000tpa para-tertiary butylphenol (PTBP) plant on

Jurong Island, Singapore. The new plant will be operational by Q2 2003. PTBP is used as an additive in the manufacture of polycarbonate and oil-soluble phenolic resins. With the commencement of operations at DIC Alkylphenol Singapore's plant, DIC's domestic plants will shift their focus to customers in Japan, Korea and Taiwan, while the new company will procure raw materials to ship to customers elsewhere in Asia. (February 7, 2002)

DuPont Textiles and Interiors (DTI), a subsidiary of **DuPont** of the US, will open a third lycra plant in Singapore at a cost of US\$142m. The new plant will produce lycra and will increase DTI's production capacity by 50%. Products from the plant will be supplied to mills and manufacturers in Asia-Pacific. The subsidiary will handle the nylon fibres, polyester fibres and the lycra brand fibre businesses. DTI has invested US\$36m in a new R&D facility, the only one of its kind outside the US. (March 10, 2002)

The **Economic Development Board** remains unsure of the performance of Singapore's chemical cluster, stating that recovery hinges on the strength of the global economic recovery. In 2001 nominal output fell 10% to US\$29bn and value-added fell 16% to US\$3.7bn. The petroleum industry contracted 13%, while the petrochemicals and specialty chemicals industries declined 1.8% and 7.1% respectively. In terms of volume the cluster's overall output declined only 0.1%. Predicted output in dollar terms for 2002 remains uncertain, while the prospects for output in volume terms looks brighter, thanks to contributions from new plants such as **ExxonMobil's** US\$2bn chemical complex. For the petrochemical and specialty chemicals industries, new growth areas include performance materials and nanotechnology. (February 1, 2002)

TAIWAN

Ashland Specialty Chemical Co has formed a new Taiwan subsidiary, **Ashland Taiwan Co Ltd (ATCL)** and has opened a new clean-room applications laboratory in Hsin Chu, Taiwan. ATCL is now the single source in Taiwan and China for direct sales and distribution of Ashland's wet process chemicals, Ashland-ACT photoresist strippers, etch residue removers, CMP slurries and post-CMP cleaning products. (March 26, 2002)

Chi Mei of Taiwan and **Asahi Kasei** of Japan will start commercial production at their 50,000tpa JV polycarbonate (PC) plant in Tainan, Taiwan, in June 2002. The JV, which is based on Asahi's proprietary non-phosgene technology, will produce optical-disc and injection-moulding grade PC. This will be the first commercial use of the technology as well as the first PC production by Asahi. (February 21, 2002)

Formosa Plastics Group (FPG) of Taiwan will build a naphtha cracker in coastal mainland China's Jiangsu Province. The plant's output will supply the mainland market and will therefore not overlap with the markets of the group's Sixth Naphtha Cracking Project in Taiwan. (March 18, 2002)

Taiwan Synthetic Rubber (TSR) has started the production of styrene-ethylene-butylene-styrene (SEBS), a type of high-end thermoplastic elastomer (TPE). TSR invested NT\$800m (US\$23m) to set up a SEBS production line with a capacity of 12,000tpa. SEBS, also termed hydrogenated styrene-butadiene TPE, is a type of high technology synthetic rubber with resistance to climatic impact and heat. SEBS is widely used to make handles of hand tools, adhesive, sporting goods, and toys, with its price two to three times those of ordinary TPE. (March 11, 2002)

THAILAND

The Petroleum Authority of Thailand (PTT Plc) is interested in pursuing specialty chemicals projects with either foreign or domestic partners. The formerly state-owned recently privatized oil, gas and petrochemicals company has focused on commodity production through its cracker and aromatics subsidiaries **National Petrochemical Co (NPC)**, **Thai Olefins Co (TOC)** and **Aromatics Thailand Co.** (February 20, 2002)

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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 and acquisitions. BDA helps clients to find local business and has senior advisors in Bangkok, Jakarta, Kuala Lumpur, Manila, Seoul, Shanghai, Taipei and Tokyo. For further information on BDA's services or on any of the articles in this newsletter, please contact Euan Rellie at erellie@bdallc.com.

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