

ASIA IS A BUSINESS IMPERATIVE... NOW MORE THAN EVER

ASIAN SPECIALTY CHEMICALS NEWSLETTER

Issue 18, April 2000

A bimonthly newsletter of developments in the chemicals sector

CONTENTS

INTRODUCTION	1
CHINA / HONG KONG	1
INDIA	2
INDONESIA	3
JAPAN	3
KOREA	3
MALAYSIA	4
PHILIPPINES	4
SINGAPORE	4
TAIWAN	5
THAILAND	5
VIETNAM	5
FOCUS: Chemical Logistics in Singapore	6

INTRODUCTION

The specialty chemicals sector in Singapore recorded a 30% increase in output in 1999. To serve the needs of the sector locally and regionally, Jurong Island is being developed as a chemical logistics hub. In this issue we profile the key players in Singapore's chemical logistics services industry.

We hope that you find *Asian Specialty Chemicals Newsletter* informative. BDA is a corporate finance advisory firm which helps clients to identify and to execute acquisitions and JVs in Asia. If you think that BDA's services may be useful to you, please contact us in New York at (212) 265-5300, Singapore at (65) 533-8500 or via e-mail at erellie@bdallc.com.

Euan Rellie
Managing Director

CHINA/HK

Albemarle Corporation of the US and **Jinhai Chemical and Industry Company Ltd** of China have formed a JV, **Ningbo Jinhai Albemarle Chemical and Industry Company Ltd**. The JV, which was established to serve the growing market for polymers in China and specialty stabilizers abroad, will manufacture, sell and export specialty polymer stabilizers, flame retardants and select fine chemicals. It will use Jinhai's strong manufacturing capabilities and Albemarle's technology and market reach. (March 20, 2000)

China Synthetic Rubber Corp (CSRC) of Taiwan has completed its acquisition of China's **Anhui Ma'anshan Carbon Black Co**, which will be renamed **China Synthetic Rubber (Ma'anshan) Chemical Industry Co**. CSRC plans to invest US\$20m to increase carbon black capacity at its newly-acquired facility in Anhui from 25,000tpa to 60,000tpa by 2002. (April 7, 2000)

Dow Chemical of the US and **Asahi Chemical Styron Asia** have established a JV in Fancheng Harbor, Guangxi Province, to produce polystyrene. The JV's 120,000tpa facility will be used as a distribution center for Central and North China. (March 17, 2000)

Formol y Derivados (FYDSA) of Spain plans to form a JV to produce 40,000tpa of paraformaldehyde with a local partner. FYDSA, the world's largest paraformaldehyde producer, intends to build China's first paraformaldehyde facility. The plant, which will use FYDSA's technology, will also produce urea-formaldehyde, melamine-formaldehyde and phenol formaldehyde glue and resin. (March 9, 2000)

Honeywell Specialty Chemicals (Suzhou) Co Ltd, a subsidiary of US-based **Honeywell Company**, is constructing a plant in Jiangsu Province to produce high-grade wax additives and other chemical products for the Asian markets. The US\$16m plant will be completed in Q4 2000. (April 6, 2000)

Montell Polyolefins of the Netherlands is to form a polypropylene JV with its Taiwanese affiliate, **Taiwan Polypropylene Co Ltd (TPP)**, and **Qingdao Kailian Group** of China. A 300,000tpa facility is being built in Qingdao, Shandong Province for the JV. Montell, along with TPP, will hold a 90% stake in the JV and provide spheripol technology. Qingdao Kailian Group will hold the remaining 10% and will supply polypropylene and ethylene from its refinery in Qingdao. (March 9, 2000)

INDIA

Austin Chemical Co Inc of the US has established a JV with the R&D division of **Shasun Chemicals and Drugs Ltd** of India. The JV, which will have an initial investment of US\$1m, will produce low volume, high value, active pharmaceutical ingredients. (March 2, 2000)

Ciba Specialty Chemicals Ltd is launching an additives unit in Santa Monica, Goa. It is separating its facilities from **Novartis India** and building new 3,000tpa facilities for the production of *Irganox 1010*, *Irganox 1076*, and consumer care products such as optical brighteners, textile chemicals and leather chemicals. (March 16, 2000)

Degussa-Hüls AG of Germany has acquired **Anandeya Silica's** silicic acid facility in Patalganga, Maharashtra through its Indian subsidiary, **Insilco Ltd**. Capacity at the 6,000tpa plant will be increased to 10,000tpa. (March 17, 2000)

Esvyn Biosys International Ltd (EBIL), a 51:49 JV between **Esvin Group** of India and **Biotech**

International Ltd of Australia, will begin production of Biotech's *B230* paper pulp bleach enzyme for the Indian and African markets. EBIL is to manufacture *B230* at a plant in Chennai that belongs to its local business partner, **Malladi Drugs and Pharmaceuticals**. (February 19, 2000)

Mitsubishi Chemicals Corporation of Japan will begin production of 350,000tpa of purified terephthalic acid at its new plant in Haldia, West Bengal through its Indian subsidiary, **MCC PTA India Ltd**. The facility, which costs an estimated ¥40bn (US\$360m), is one of the largest investments by a Japanese company in India. Mitsubishi Chemicals Corporation holds a 66% stake in MCC PTA India Ltd. **Mitsubishi Corporation** and four other major Japanese firms hold the remaining equity. (March 10, 2000)

Monsanto Chemicals India Ltd (MCIL), a 40% subsidiary of **Monsanto** of the US, intends to consolidate its agribusiness in India by May 2000 through a series of acquisitions involving **Monsanto Enterprises Ltd**, **Monsanto India Ltd** and **Monsanto Technologies India Ltd**. This move will increase Monsanto's stake in MCIL to 70%. (March 21, 2000)

Rohm & Haas of the US plans to increase investment in India through acquisitions, JVs and greenfield projects. Rohm & Haas' Indian operations were started in 1960. The company's expansion into India entails the introduction of specialty polymers and chemicals for use in paints and coatings, household goods and personal care products, adhesives and sealants, agrochemicals, water treatment products and electronic chemicals. (March 22, 2000)

Sun Chemicals Group BV of the Netherlands has increased its stake from 51% to 76% in **Coats of India Ltd**, a JV with UK-based **Coats Brothers (CB)**. The transaction was approved by India's Foreign Investment Promotion Board. In a separate transaction, CB will sell its ink operations to Sun Chemicals Group. (March 8, 2000)

INDONESIA

Bayer Indonesia, a subsidiary of **Bayer AG** of Germany, is to acquire a majority stake in the 32,000tpa local polyols unit of **Lyondell** of the US. The acquisition of the unit in Merak, West Java will strengthen Bayer's position in the Indonesian polyol market as Lyondell is a leading polyols producer there. The transaction is part of Bayer's US\$2.5bn takeover of Lyondell's global polyols unit. (March 2, 2000)

Federal Chemical Marketing of Singapore and **PT Lautan Luas** of Indonesia are establishing a JV, **PT Daiti Carbon Nusantara**, to produce 3,600tpa of activated carbon at a facility in Pontianak, West Kalimantan. Lautan Luas, which invested US\$1m in the JV, holds a 75% equity stake. (March 28, 2000)

Showa Denko Esterindo Indonesia, a JV to produce 50,000tpa ethyl acetate, has been set up by **Showa Denko** of Japan and **Indochemical** of Indonesia. **Tomen Corp** of Japan and **Chin Leong Corp** of Singapore will also hold small stakes in the JV. (March 20, 2000)

JAPAN

Degussa-Hüls AG of Germany and **Mitsubishi Materials** of Japan have signed a 30 year cooperation agreement. The agreement enables Degussa-Hüls to raise its stake by 30%-80% in its JV with Mitsubishi Materials, **Nippon Aerosil**. It also outlines cooperation between **Degussa-Hüls Corp** and **Mitsubishi Polycrystalline Silicon American Corp**. (March 31, 2000)

Fuji Film Olin, a JV between **Olin** of the US and **Fuji Photo Film** of Japan, will be the first to produce colored filters for LCD screens in Japan. The filters are made of acrylic materials that are light sensitive and contain pigments. Fuji Film Olin will also produce the filters at a 5,000tpa facility in Taiwan that is expected to come onstream in August 2000.

Production at the Taiwanese facility will be integrated with production in Japan. (March 23, 2000)

Japan Fine Coatings, a 50:50 JV between **DSM Desotech** of the US and **JSR Corp** of Japan, is building a US\$35m plant for radiation-cured coatings for fiber optic materials in Tsukuba. The plant will come onstream in H1 2001 with an initial capacity of 3,000tpa. (March 21, 2000)

Merck Japan recorded a 25% increase in sales in 1999 and anticipates a further increase of 10%-15% in 2000. The acquisition of the sales and marketing operations of **CN Japan**, following the acquisition of its parent company, **CN Bioscience** by **Merck KgaA** of Germany, is expected to further growth in 2000 as is the transfer of exclusive marketing rights for Merck's laboratory products from **Kanto Denka Kogyo**. Increased sales in 1999 are believed to result from high local demand for liquid crystals, certain fine chemicals and pigments. (March 13, 2000)

Saehan Industries of Korea and **Toray Industries** of Japan have established a JV in Tokyo to produce 90,000tpa of polyester (PET) film. The JV, which began production in Q4 1999, already has a market share of 35%-40% and has increased Toray's global capacity for PET film to 300,000tpa. (March 10, 2000)

Teijin-Bayer Polytec, a Japan-based JV between **Bayer AG** of Germany and **Teijin Chemicals** of Japan, has developed a polycarbonate (PC) resin for optical discs. Teijin-Bayer plans to produce 5,000tpa of PC resin by 2005. Made from bisphenol, it has a higher rigidity, lower birefringence and a lower rate of water absorption than normal resin. (March 17, 2000)

KOREA

BASF AG of Germany plans to spend EUR400m (US\$420m) to increase its capacity for raw materials for polyurethanes, specialty chemical products and

intermediaries for fibers in Korea. BASF will build a 20,000tpa facility to produce acid chlorides and chloroformates at Yosu. It will also expand capacity at its facilities in Ulsan, where it produces polyether polyols, butanediol and tetrahydrofuran. (March 23, 2000)

Great Lakes Chemical of the US will start up a hindered phenolic antioxidant unit in Korea in 2001. This project is part of an initiative to increase its worldwide capacity for antioxidants for polyolefins, styrenic and engineering plastics by over 30%. (March 22, 2000)

Hyundai Petrochemical Co (HPC) and **Samsung General Chemicals (SGC)** of Korea are separately seeking foreign partners for their petrochemical operations in Daesan, following the collapse of their plan to merge and form the single largest ethylene producer in Asia. The merger talks ended due to withdrawal from the transaction of Japan's **Mitsui & Co** and **Sumitomo Corp** as their requirements were considered stringent and unacceptable by the Korean firms. HPC is reportedly exploring opportunities for cooperation with **Mitsui Trading** of Japan. Alternatively, it may split up and divest its downstream operations. (March 14, 2000)

Oriental Chemical Industries (OCI) of Korea is to acquire an 89.6% stake in Pohang-based **Korea Steel Chemical (Kosco)** from **Korea Deposit Insurance Corp** for W235bn (US\$212m). In addition to coal tar chemicals and intermediaries for pharmaceuticals and pesticides, Kosco produces 400,000tpa of carbon black. Its revenues average W400bn (US\$360m) per year. (March 14, 2000)

Songwon Industrial Co of Korea has signed an agreement with **CK Witco** of the US to export US\$30m worth of methyl tin stabilizers. Songwon Industrial has expanded stabilizer production capacity at its Ulsan plant from 1,500tpa to 5,000tpa. (February 14, 2000)

To submit stories to the *Asian Specialty Chemicals Newsletter* please contact Parul Gandhi on (212) 265-5300 or pgandhi@bdallc.com

MALAYSIA

Croda International of the UK plans to double capacity at the **Wolstenholme Redox Sdn Bhd** specialty resins production facility in Kuala Lumpur it acquired from **Wolstenholme International** of the UK. Croda intends to build a new specialty resins plant in Malaysia in 2001. (April 7, 2000)

PHILIPPINES

Tosoh Corp of Japan plans to increase PVC capacity of its Batan-based JV with **Philippine Resins Industries** in response to high demand for PVC in the Philippines and throughout Asia. The JV is currently operating at full capacity, 70,000tpa. Tosoh will decide whether to improve its existing facilities, raising capacity by 30,000tpa, or to build new production lines, doubling its present capacity, by Q3 2000. (March 28, 2000)

SINGAPORE

Asahi Chemical Industry of Japan is to build a 50,000tpa polyphenylene ether (PPE) resin facility in Singapore. Demand for Xyron modified PPE is expected to increase at 10% per year, and Asahi, which has three compounding operations in ASEAN alone, is seeking to become one of the three leading world producers of the resin. (March 8, 2000)

Croda International of the UK has inaugurated a US\$50m plant on Jurong Island to produce 15,000tpa of specialty esters, 15,000tpa of specialty alkoxylates and new, higher value specialty chemicals. Croda's investment in the plant represents its largest single investment worldwide. Croda expects to increase

investment in the facility over the next five years. (March 15, 2000)

Teijin Polycarbonate Singapore (TPS), a JV between **Teijin Ltd** and **Teijin Chemicals** of Japan and **EDB Investments** of Singapore, is to start production at its new, 60,000tpa polycarbonate plant on Jurong Island. TPS expects to generate US\$140m in annual revenues from the Panlite PC resins produced at its US\$190m plant. It also plans to expand capacity to 80,000tpa in Q4 2000, in anticipation of an acute shortage of polycarbonate in the region. (March 3, 2000)

TAIWAN

Mitsubishi Gas Chemical (MGC) of Japan has formed a JV to produce super pure hydrogen peroxide with **Mitsubishi Precision Chemical Company**, the Taiwanese operation of **Mitsubishi Corporation**. MGC holds an 85% equity stake in the JV, which is expected to come onstream in Q4 2000. The construction of a 6,000tpa facility in Taichung is underway. (February 28, 2000)

Praxair Chemax Semiconductor Materials (PCSM), a JV between **Praxair Inc** of the US and Taipei-based **Chemax International Corp**, will begin production at its semiconductor gases facility in Toufen in Q2 2000. PCSM distributes more than 40 gases used in the manufacture of semiconductors and provides special gas handling and monitoring equipment and related services. Output from the Toufen facility will mainly serve the microelectronics industry in Taiwan. (March 2, 2000)

THAILAND

Phenolchemie, the Belgium-based subsidiary of **Degussa-Hüls AG** of Germany, will build a 200,000-300,000tpa phenol facility in Mab Ta Phut. Production

is not scheduled to begin until 2004, but once it does, Phenolchemie expects to supply a large proportion of phenol as feedstock to **Bayer's** forthcoming 160,000tpa bisphenol A facility. (March 8, 2000)

Pornpat Chemicals, a Thai subsidiary of **Tokuyama Corp** of Japan, has completed a 6,000tpa facility for the production of granule-type wet silica. Tokuyama Corp has a production capacity of 18,000tpa and plans to further increase capacity to 30,000tpa by 2002. The new plant will supply the silica to shoe manufacturers and tire producers. (March 27, 2000)

United Silica (Siam) Ltd, a Bangkok-based JV between **Degussa-Hüls AG** of Germany and **Oriental Siam Co Ltd**, is to acquire the 12,000tpa capacity silicic acid plant of **Oriental Silica Ltd (OSL)** in Mab Ta Phut. Degussa-Hüls has a 70% stake in United Silica (Siam) Ltd, and the acquisition will increase its precipitated silicic acid and silicates market share in Asia to 20%. (March 17, 2000)

VIETNAM

Marubeni of Japan has withdrawn from a project to produce 100,000tpa of PVC with **Petronas** of Malaysia and Vietnamese firms **PetroVietnam Gas Company (Vietgas)** and **Import-Export Technical Raw Material Trading and Supply Company**. The halving of the import surcharge tax in Vietnam to 3% reportedly prompted Marubeni's withdrawal. Vietgas, which previously had a 15% stake in the project, will absorb Marubeni's shares, increasing its stake to 45%. Petronas will retain its 40% stake, and Import-Export Technical Raw Material Trading and Supply Company will keep its 15% stake in the project. (March 21, 2000)

Mitsui Chemicals and **Mitsui & Co** of Japan intend to sell their stakes in **Mitsui Vina Plastic and Chemical (Viplaco)**, their PVC JV with **Thai Plastic and Chemicals (TPC)**. The reason cited for the withdrawal of the two Mitsui companies is a lack of support from the Vietnamese Government, which

allegedly assured the firms that it would introduce import tariffs of at least 25% once Viplaco's 80,000tpa plant came onstream. However, the government actually reduced the tariff to 3% in response to intense lobbying by downstream PVC converters. (April 3, 2000)

FOCUS

Chemical Logistics in Singapore

The chemical logistics industry in Southeast Asia is expanding rapidly. This is particularly true in Singapore, where government agencies such as the Economic Development Board and Jurong Town Corporation are facilitating the establishment of a major chemical logistics hub on Jurong Island, home to 55 petroleum and chemical companies with fixed assets worth approximately US\$12bn. Eighty hectares of land have been set aside for the hub, which the Government hopes will strengthen Singapore's position as a premier chemicals transshipment center.

The chemicals industry in Singapore recorded an output of US\$14bn in 1999 and is expected to reach US\$42bn by 2010. In addition to meeting the needs of the growing chemicals industry, the hub will be able to serve the electronics industry, which also uses specialty chemicals. When the hub is fully built up, it is anticipated that more chemical manufacturers will outsource their logistics activities. The hub is also expected to attract approximately US\$450m in fixed asset investments from logistics service providers.

The most basic services offered by the chemical logistics service providers cropping up on Jurong Island are chemical handling and distribution, and the provision of specialized storage facilities such as silos and hazardous chemical warehouses. Chemical logistics services increasingly entail supply chain management, chemical sampling, packaging, blending, emergency response and safety consulting. An integrated logistics electronic commerce network which will be

implemented at Jurong Island in 2000, will provide chemical manufacturers with even greater options.

The following paragraphs outline the activities of some local players and JVs in the chemical logistics market in Singapore:

CWT Distribution Ltd (CWT) is one of the largest local integrated logistics service providers, with operations throughout Asia and in Dubai, United Arab Emirates. As part of a strategic plan to expand into specialized logistics, CWT has established **Leschaco-CWT Distribution**, a JV with **Leschaco Pte Ltd (LPL)**, which is part of **Lexsau Scharbau Group** of Germany. In addition to chemical warehousing, transportation and supply chain management services, the JV will provide value-added services from a state-of-the-art chemical logistics center on Jurong Island.

DoveChem Group, a Singapore-based regional company with interests in the chemical and related industries, has established a JV with **ChemCentral Corp** of the US. The primary function of the new venture, **DoveChem Central Pte Ltd**, will be to support the regional operations of ChemCentral's US clients. It will use DoveChem's existing facilities throughout Asia to distribute specialty chemicals to manufacturers of products such as inks, coatings, adhesives, rubbers and plastics.

G&U Logistics provides logistics services for the chemical industry in Asia, Europe and the US. Handling, transporting and warehousing are the primary services G&U provides, but it is also moving into providing value added services such as sample taking, repackaging, labelling, testing and order processing. In 1999 G&U built a US\$38m chemical logistics center, which was the first in the region with the capability and capacity to handle all categories of hazardous materials. In 2000 G&U plans to inaugurate offices in Hamburg, Germany and Hong Kong.

Poh Tiong Choon Logistics Ltd (PTC), a subsidiary of integrated logistics service provider **Poh Tiong Choon Group**, is a publicly listed chemical logistics firm. PTC is to invest US\$15m in a third party logistics complex on Jurong Island. The new facility will

comprise hazardous and nonhazardous drumming plants and storage facilities for hazardous cargo. It will also be integrated with Internet-ready warehouse management systems that will enable real-time identification, tracking and management of cargo.

SembCorp Logistics Ltd is one of the largest Singapore-based logistics management companies. While it does not specialize in chemical distribution, its chemical logistics activities have driven a near term forecast of 20% growth of its supply chain management. SembCorp has established a JV, **Katoen Natie SembCorp (KNS)**, with Belgian chemical logistics provider, **Katoen Natie**, which will specialize in chemical logistics. KNS will provide packaging and logistics support for Exxon's forthcoming US\$2bn petrochemical plant in Singapore.

Euan Rellie, Managing Director
Parul Gandhi, Analyst

Christina Meyer, Editor
Kathleen Ng, Analyst

ABOUT BDA

Business Development Asia is a corporate finance advisory firm which assists multinational companies to expand their businesses in Asia. BDA specializes in the chemical industry and helps clients to find local business partners. BDA has senior advisors in Bangkok, Jakarta, Kuala Lumpur, Manila, Seoul and Shanghai. For further information on BDA's services or on any of the articles in this newsletter, please contact Euan Rellie or Charles Maynard, through our New York office, or Andrew Huntley in Singapore.

New York

Business Development Asia LLC
The Economist Building, Suite 405
111 West 57th Street
New York, NY 10019
Tel: (212) 265-5300
Fax: (212) 265-4300

Shanghai

Business Development Asia
American International Centre
at Shanghai Centre, Suite 506A
1376 Nanjing Road West
Shanghai, China, 200040
Tel: (86) 1360-1729-383

Singapore

Business Development Asia Utd Pte Ltd
20 Raffles Place
#10-07 Ocean Towers
Singapore 048620
Tel: (65) 533-8500
Fax: (65) 533-8506

bda@bdallc.com
www.bdallc.com