

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

ASIAN SPECIALTY CHEMICALS NEWSLETTER

Issue 24, April 2001

A bimonthly newsletter of developments in the chemicals sector

CONTENTS

INTRODUCTION	1
CHINA / HK	1
INDIA	2
INDONESIA	2
JAPAN	2
KOREA	3
PHILIPPINES	4
SINGAPORE	4
TAIWAN	4
THAILAND	4
FOCUS: Technology driven changes in the global specialty chemicals industry	5

INTRODUCTION

The global specialty chemicals sector has undergone rapid restructuring and reforms over the past decade. In this issue, we examine an underlying trend that is driving changes in the industry: the increase in adaptation of technology as a means of lowering production and distribution costs.

We hope 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

Dainippon Ink and Chemicals (DIC) of Japan and **Shanghai Showa Highpolymer (SSH)** of China have extended their alliance to encompass their bulk moulding compounds (BMC) and vinyl ester resin businesses. Following the acquisition of a 20% share in SSH, DIC will cease BMC production at its Changzhou plant, transferring production to Shanghai. It will then supply the raw material needs of SSH through its 100,000tpa polyester resin and 10,000tpa epoxy resin plants in Wuxi. SSH has a 5,000tpa BMC plant and is building a 3,600tpa vinyl esters plant in Shanghai. (March 21, 2001)

Grand Pacific Petrochemical Corp (GPPC) of Taiwan is increasing its acrylonitrile butadiene styrene (ABS) capacity at its plant in Zhenjiang, China, to 120,000tpa from 80,000tpa. The expansion is already underway and will be completed by Q1 2002. GPPC also operates a 85,000tpa ABS plant in Kaohsiung, Taiwan. (March 21, 2001)

Mitsubishi, Mitsubishi Rayon, Marubeni and **Itochu**, all of Japan, have set up a US\$120m JV with **Ningbo Investment Company** of China to manufacture acrylic fiber in Ningbo, Zhejiang province. (March 12, 2001)

Nanjing Yangzi Eastman Chemical Ltd of China has started producing Eastotac hydrocarbon tackifying resins for the adhesives market. Its plant, located in Jiangsu province, will manufacture six compositions of hydrogenated Eastotac resins. Nanjing Yangzi Eastman Chemical Ltd, a JV between **Eastman**

Chemical Ltd of the US and **Yangzi Petrochemical Industrial Corp** of China. (March 2, 2001)

Wuxi Kuanyu Packing Material, a JV between **Wuxi Kuanyu** and **Sumitomo** of Japan, will increase its bioriented polypropylene (BOPP) films capacity from 28,000tpa to 40,000tpa. It will achieve this by adding a new high throughput wide films production line. (March 1, 2001)

INDIA

BASF of Germany has formed a new company, **BASF Styrenics Pvt Ltd**, through a strategic alliance with **The Chatterjee Group** of India to manufacture and sell polystyrene in India. BASF has less than 5% of the Indian polystyrene market, while the local company, **Supreme Industries**, controls more than 70% of the market. (February 28, 2001)

Ciba Specialty Chemicals India Ltd (CSCIL) of India has completed the sale of its performance polymers business to **Vantico Performance Polymers Pvt Ltd** of India, a new subsidiary of **Vantico International**. The sale is part of the decision taken by CSCIL's parent company, **Ciba Basle**, to divest its polymer business worldwide. **Ciba India Pvt Ltd**, Ciba's wholly-owned subsidiary, has also sold its 76% stake in the JV, **Petro Araldite Pvt Ltd (PAPL)**, to Vantico International. **Tamil Nadu Petro Products** of India holds the remaining 24% stake in PAPL. (March 23, 2001)

Hikal, an Indian specialty chemicals producer, will acquire the pharmaceutical intermediates division of **Wintac** of India. The acquisition includes Wintac's plant in Bangalore where the company will produce the intermediates and develop formulations and active ingredients to be used in pharmaceuticals. It is estimated that Hikal's revenues will reach US\$100m by 2006. (April 2, 2001)

Huntsman Corporation of the US has acquired the polyurethane (PU) business of **ICI India**, a subsidiary

of British paints and chemicals manufacturer **ICI Plc**, for Rs825m (US\$17.7m). The acquisition was executed through Huntsman's local subsidiary, **Huntsman International (India) Pvt Ltd**, which will integrate ICI India's PU business with its specialty chemicals business called **Huntsman Polyurethanes**. (March 21, 2001)

The **Mahindra Group** of India has signed an MOU with **BASF** of Germany to divest its entire stake of 24% in the JV **Schenectady-Beck**. BASF currently holds a 51% equity stake in the JV, and the remaining 25% is held publicly. Schenectady-Beck produces insulating varnishes and resins at its plants in Pune and Ankleshwar, India. (March 20, 2001)

STS Chemicals (STSC) of India hived off its anti-corrosives business into a separate entity in which **Eftec Inc** of Switzerland acquired a 49% stake. STSC holds the remaining 51% stake. The JV has been renamed **Eftec Chemicals India**. (February 27, 2001)

INDONESIA

PT Styrene Monomer Indonesia (SMI) of Indonesia plans to increase its production capacity of styrene monomer by 80,000tpa to 380,000tpa, due to growing market demand for the chemical. (March 7, 2001)

JAPAN

Asahi Kasei's acrylonitrile production has been reduced by 15% at two of its Japanese plants, which have a combined capacity of 400,000tpa. This is due to declining prices and low production rates of derivatives. **Tongsuh Petrochemical**, Asahi's Korean subsidiary, is running its 130,000tpa plant at 8% under full capacity. (March 14, 2001)

Mitsubishi Gas Chemical of Japan plans to increase MMA capacity at its production plant in Niigata, Japan from 10,000tpa to 50,000tpa. (March 26, 2001)

Mitsubishi Rayon of Japan and **Cementhai Chemical** of Thailand will increase capacity by 15,000tpa at their Thai MMA JV to 70,000tpa. In addition, Mitsubishi Rayon will debottleneck its 215,000tpa MMA facility at Otake by 50,000tpa. The company has also started a feasibility study for a 100,000 to 150,000tpa MMA facility in the US. (March 21, 2001)

Mitsui Chemicals of Japan will take over the exclusive distribution rights in Japan of cycloolefin copolymers (COC) from **Ticona** of Germany, the technical polymers division of **Celanese AG**. Mitsui also owns non-exclusive distribution rights for other Asian countries. Ticona manufactures COC at its new production facility at the Ruhrchemie plant in Oberhausen, Germany. This facility came onstream in 2000 and has a capacity of 30,000tpa. (March 7, 2001)

Sankyo Corporation of Japan has announced its intention to exit the chemicals business and focus exclusively on its core pharmaceutical business by March 2003. The company plans to do so by selling its agricultural and specialty chemicals operations. Sankyo's non-pharmaceutical businesses generated revenues of US\$346.4m in 2000. (March 12, 2001)

Sanyo Chemical Industries and **Mitsubishi Chemical** of Japan will merge their superabsorbent polymers businesses into a new company, **San-Dia Polymers Ltd**. The new company is capitalized at ¥2bn (US\$16.4m). It anticipates first year revenues of ¥10.2bn (US\$83.9m) and pre-tax profits of ¥300m (US\$2.5m). (February 22, 2001)

Teijin and **Polyplastics** of Japan, are jointly constructing a 50,000tpa continuous polymerization plant in Matsuyama, Japan. The project is expected to increase Teijin's market share in the polybutylene terephthalate (PBT) market in Japan from 13% to 14%. PBT demand is 80,000tpa in Japan and 90,000tpa in the rest of Asia. (March 15, 2001)

Ube Industries of Japan has identified caprolactum, polyamides, pharmaceuticals and electronics materials as its core products. As part of its new three year corporate strategy, Ube plans to make additional investments in caprolactum and nylon resins in Thailand. It will also boost its polyamide capacity in Japan. Separately, Ube is considering exiting the PE business. (March 23, 2001)

KOREA

Huvis Corp, a 50:50 JV between **SK Chemical** and **Samyang Corp** of Korea, is considering the acquisition of **Saehan Industries'** polyester filament yarn (PFY) and polyester staple fiber (PSF) operations. The company is expected to make a decision by H2 2001. Huvis' PFY capacity is 230,000tpa, and its PSF capacity is 390,000tpa. Production capacities for PFY and PSF at Saehan Industries' facilities are 380,000tpa and 590,000tpa respectively. (March 6, 2001)

SK Corp of Korea is reviewing a plan to sell off its styrene monomer plant in Ulsan, South Kyongsang Province, to **BASF Korea**. The plan is part of a restructuring program for its petrochemical division. SK Corp is expected to concentrate on oil refining and Internet-based new businesses after restructuring the petrochemical division. (March 8, 2001)

PHILIPPINES

Philippine Resins Industries will invest US\$32m to increase the PVC capacity at its Bataan plant which started production in 1999. Capacity will be increased from 100,000tpa to 200,000tpa by 2003. (March 16, 2001)

SINGAPORE

Asahi Kasei Corp of Japan has cancelled its plan to build a polyacetal plant in Singapore due to tepid demand and sagging prices for the product in the Asia-Pacific region. Asahi will focus on its ¥12bn (US\$98.7m) polyphenylene ether (PPE) powder and modified PPE (mPPE) projects in Jurong Island, Singapore, with JV partner **Mitsubishi Gas Chemical** of Japan. Polyacetal, an engineering plastic, is often used in electronics, automotive and other industrial applications. (March 26, 2001)

TAIWAN

Asahi Kasei and **Tasco Chemical** of Japan are conducting a feasibility study for building a 50,000tpa MMA unit in Taiwan as part of a JV. Asahi has a 70,000tpa unit in Japan, which makes 20,000tpa for Mitsubishi Rayon. Asahi may decide to expand this unit. (March 26, 2001)

Chang Chun Plastics Co of Taiwan will build a 73,000tpa polybutylene terephthalate (PBT) plant in Kaoshiung, Taiwan. The plant will come onstream in Q1 2002. (February 28, 2001)

Taiwan Lee Rubber, the largest Taiwanese manufacturer of bonded EPDM, has formed a strategic alliance with **Advanced Elastomer Systems (AES)** to develop, market and manufacture thermoplastic elastomers in Taiwan. AES is a worldwide leader in engineered thermoplastic elastomers (TPEs), and is a limited partnership between **ExxonMobil Chemical Company** and **Solutia Inc.** AES will supply the base materials and compounding technology. The compounds will be sold in Taiwan under the *Taiwan Lee* tradename. (March 21, 2001)

THAILAND

General Electric (GE) of the US and **Shin-Etsu Chemical** of Japan will build a methylchlorosilanes and siloxanes plant in Map Ta Phut, Thailand. The US\$250m plant is scheduled for completion by 2003. 140,000tpa of methylchlorosilanes and 70,000tpa of siloxanes will be manufactured for use as intermediates in silicone production. The JV, **Asia Silicones Monomer**, will be owned 50% by GE/Toshiba and 50% by Shin-Etsu. (March 2, 2001)

Thai GCI Resitop, a JV between **Gun Ei Chemical Industry** and **Nissho Iwai Corp** of Japan, will increase its production capacity for phenolic resins at its Map Ta Phut site, from 8,000tpa to 15,000tpa by Q3 2002. (March 21, 2001)

FOCUS

Technology driven changes in the global specialty chemicals industry

The global specialty chemicals market has been undergoing rapid restructuring and reform over the past decade. There are two underlying global trends which are driving changes in the industry. The first trend is the growing competition from new entrants, especially in emerging markets. The second trend is the increasing adaptation of technology as a means of lowering production and distribution costs.

Many manufacturers are also broadening their product lines to include offerings that are further downstream from the traditional active pharmaceutical substances and intermediates. Companies have been actively rationalizing their production facilities, outsourcing R&D and procurement to third party providers in a bid to lower costs as competition heats up in tandem with the entry of new, low cost producers from developing economies.

IT creating new opportunities for old economy

The IT revolution is creating new opportunities for industries traditionally considered low-tech. Steel, agriculture, construction are among the so-called old economy industries that have derived significant, unexpected benefits from the application of technology to their operations. The specialty chemicals industry is no exception to this trend.

Chemical portals background

Internet portals specifically targeting the chemicals industry have been in existence since at least 1998. Chemical industry portals provide a clearinghouse of industry related information and facilitate B2B ecommerce by acting as an intermediary between buyers and sellers.

Chemical portals in Asia

BDA estimates that there are between ten to fifteen active chemicals industry portals operating in the Asia-Pacific region. Each provides several levels of content, but all of them generally include a searchable product database and industry news, in addition to proprietary content (feature articles, etc). Ecommerce offerings through an on-line marketplace is becoming a valuable feature, and we expect the majority of companies to include such services going forward. We have categorized chemicals portals into three divisions largely based on the content offered and ownership structure:

- 1. Industry affiliated portals:** Industry associations play active roles in countries that host some of the major chemicals markets. This applies mostly to China and Japan. These portals are often owned by a consortium of manufacturers, and mainly serve as a trading platform and information source for the shareholders.
- 2. Corporate affiliated portals:** This group is perhaps the most diverse, and includes sites

owned by news portals (targeting a specific industry), chemical consulting companies and other corporates.

- 3. Ecommerce affiliated portals:** These sites include subsidiaries of B2B commerce sites operating in the US and EU.

The potential distribution capability of chemical industry portals makes them attractive candidates for vertical integration into manufacturers' businesses. This can take place in the form of shareholdings in existing industry-affiliated portals (as seen in Japan), or as wholly owned subsidiaries. The latter case could raise the possibility of conflict of interest. However, we imagine a case similar to airline reservation systems, many of which were developed as operating subsidiaries of airlines.

We have provided a brief summary and discussion of services offered at the representative chemicals portals targeting the Asia-Pacific region.

1. Chemicals Australia (www.chemlink.com.au)

Chemicals Australia is a chemicals industry portal owned by Chemlink Pty Ltd, an Australia-based chemicals industry consulting company. The site provides industry news, technical data, ecommerce venues and M&A advisory services relating to the chemicals sector in Australia.

Ownership: Private, subsidiary of Chemlink Pty Ltd

Content: Industry news, product database

Market: Australia

2. Chempages.com (www.chempages.com)

Chempages.com is a China-based trade portal under Chinapages.com, one of the earliest business sites in China. Chempages.com is a comprehensive product and enterprise database with a focus on the chemical industry in greater China. It hosts one of the largest B2B commerce networks in the country. The site

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

also offers information exchange, product information, industry news, relevant legal information, government policies and economic trends pertaining to the chemical industry in China.

Ownership: Private

Content: Product and enterprise database

Market: China

3. SinoBnet (www.sinoBnet.com)

SinoBnet is a leading operator of B2B communities in China. The site hosts industry-specific websites and trade community catalogs. Clients can reach potential customers, suppliers and business partners, obtain market information and conduct web-based transactions. The company operates a total of 14 websites, each catering to a specific industry segment: information technology, chemicals, automotive, broadcasting & television, advertising, media, home appliances, security equipment, fire safety equipment, teaching materials and equipment, electronic components and medical equipment, coatings, printing and packaging.

Ownership: Private

Content: Product and enterprise database

Market: China

4. AsiaChemHub.com (www.asiachemhub.com)

Singapore based AsiaChemHub.com is a virtual marketplace for the exchange of chemicals with a primary focus on Asia. The site enables Asia-based small to medium enterprises (SMEs) a platform on which to transact with buyers and sellers around the world. The site requires membership before prospective buyers and sellers can make transactions on the site. The site collects a fee based on the size of the transaction from the parties.

Ownership: Private

Content: Chemicals trading, industry news, limited proprietary content

Market: Asia ex-Japan

5. The Chemical Daily/Japan Chemicals Search (www.chemnews-japan.com)

Japan Chemicals Search (JCS) is a subsidiary site of The Chemical Daily, a news provider for the Japanese chemicals industry. The company was originally founded in 1936 as a pharmaceuticals industry news organization but is now owned by a consortium of over 324 Japan-based chemicals manufacturers. Its businesses are organized into three divisions: daily industry newspaper, publishing (print and e-media) and events (industry expositions, etc.).

The Japan Chemicals Search is the company's main Internet publisher subsidiary, with a focus on facilitating B2B transactions. The main content asset of the site is its searchable database for Japanese and Asian manufacturers. Other services include a news search, summary of major news and featured news articles.

Ownership: Private, 324 shareholders from industry

Content: Manufacturing database, industry news, ecommerce

Market: Japan and limited Asia ex-Japan

6. ASIAeCHEM.com (www.asiaechem.com)

ASIAeCHEM.com is one of the largest chemical and plastics industry ecommerce sites in Asia. The site provides a comprehensive range of both off and online services to the industry. Its online content is geared towards e-commerce, matching buyers and sellers, but also offers industry news relating to recent pricing trends in the marketplace. Other on-line content includes industry information and data (company directories, product information, latest market news and product pricing information, exhibition schedules). The company also offers off-line, trading support services such as import/export clearance in China, logistics coordination, warehousing/consignment, quality inspection, payment, and credit reference.

The target market is mainly China, and the site services manufacturers, distributors, traders and other end-users in the industry. Products covered include petrochemicals, plastics, basic industrial chemicals,

agrochemicals, fine and specialty chemicals and pharmaceutical intermediates.

Ownership: Private, including Eastman Chemical Company (USA)

Content: Manufacturing database, industry news, e-commerce

Market: Asia, ex-Japan

Euan Rellie, Managing Director
Parul Gandhi, Analyst

Joon-Ho Lee, Associate
Kathleen Ng, Analyst

ABOUT BDA

Business Development Asia is a corporate finance advisory firm which assists multinational companies to expand their businesses in Asia. For further information on BDA's services or on any of the articles in this newsletter, please contact Charles Maynard in New York, Euan Rellie in London, Andrew Huntley in Singapore or Simon Wu in Shanghai.

New York

Business Development Asia LLC
The Economist Building
111 West 57th Street, Suite 1105
New York, NY 10019
Tel: (212) 265-5300
Fax: (212) 265-4300

Singapore

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

London

Business Development Asia Ltd
10 Crown Place
London EC2A 4FT
United Kingdom
Tel: (44) 20-7655-3660
Fax: (44) 20-7655-8953

Shanghai

Business Development Asia
American International Centre
at Shanghai Centre, Suite 506A
1376 Nanjing Road West
Shanghai, China, 200040
Tel: (86) 21-6279-8390
Fax: (86) 21-6279-8906

Tokyo

Business Development Asia
Otemachi First Square
4/F East Tower, 1-5-1 Otemachi,
Chiyoda-ku
Tokyo, 100-0004 Japan
Tel: (81) 3-5219-1504
Fax: (81) 3-5219-1201

Hong Kong

Business Development Asia
(HK) Ltd
1409 World Wide House
19 Des Voeux Road Central
Hong Kong
Tel: (852) 2537-9565
Fax: (852) 2537-4406

bda@bdallc.com
www.bdallc.com