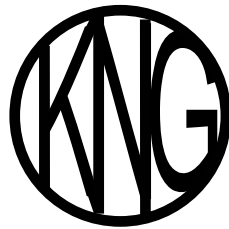

ASIAN ADHESIVES & SEALANTS

2008-2013

A Multiclient Study

NOW AVAILABLE

March, 2009



KUSUMGAR, NERLFI & GROWNEY, INC.

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ABUNDANT OPPORTUNITIES

Formulated adhesive and sealant consumption in Asia was 7.5 billion pounds in 2008 worth \$8.5 billion. Growth in the region was strong in the first half of the year, but fell off in the fourth quarter. Regional growth for 2009 is projected at 2-3% with China and India leading the way. Long term growth through 2013 is forecast to average 6%/yr. All of the countries in the region have announced stimulus programs. Interest rates have also been lowered to spur the economies. China and India have weathered the downturn the best. Japan, South Korea, and Taiwan have experienced sharp downturns. Formulated adhesive consumption in Asia was 6.6 billion pounds in 2008 valued at just over \$7 billion. Sealant consumption was 870 MM lb worth \$1.44 billion. Adhesives and sealants are each forecast to advance 6%/yr through 2013.

China has moved to the top position in regional sales, overtaking Japan which led at the start of the decade. As shown in Table 1, China consumed \$3,730 MM of adhesives and sealants in 2008, some 44% of the dollars. China's 3.7 billion lb of adhesives and sealants was one-half of the regional volume. Only modest growth of 6-7% is projected for 2009. Japan is the second largest adhesive and sealant consumer in Asia-Pacific with just over one-quarter of the dollars and about one-fifth of the volume. The worldwide financial crisis and the appreciation of the yen caused the economy to falter in the second half of 2008

South Korea and Taiwan are third and fourth in Asia-Pacific adhesives and sealants, each with about 6% of the dollars. Both are mature economies with adhesive and sealant growth forecast at 1-2%/yr through 2013; 2009 will be a down year. India is the fifth largest consumer of adhesives and sealants in Asia-Pacific, but the country edges out China to garner the second fastest growth rate. Adhesive and sealant consumption in India is low considering that it has the world's second largest population.

Pressure sensitive adhesives are the largest end use representing about one-third of the adhesive and sealant volume in 2008 and one-fifth of the value. Construction adhesives and sealants are second with 13% of the pounds and 17% of the dollars. Construction and automotive adhesives and sealants, along with electronic adhesives, are the end uses that have been most hurt by the global economic slowdown. Packaging, disposables, and consumer applications have held-up better.

Table 1					
ASIAN ADHESIVE & SEALANT CONSUMPTION BY COUNTRY					
Country	2008		2013		%AGR, LB
	\$MM	%	\$MM	%	
China	3,730	44	5,850	51	9
Japan	2,170	26	2,245	20	0
South Korea	530	6	565	5	1
Taiwan	500	6	575	5	2
India	380	4	645	6	11
Others	1,190	14	1,570	14	6
TOTAL	8,500	100	11,450	100	6

THE STUDY

ASIAN ADHESIVES & SEALANTS characterizes consumption for base year 2008 and provides projections to the year 2013. The report gives a comprehensive analysis of adhesive and sealant consumption by country, application, and technology in Asia. Growth rates, trends, recent developments, supplier structure, applications, and end users are assessed. Separate sections of the report summarize each end use and adhesive and sealants by polymer type.

An Executive Summary provides subscribers a concise, easy to read representation of the Asian adhesive and sealant industry. The Business Analysis summarizes consumption by segment and technology and details the adhesive and sealant supplier structure in Asia. A review of mergers and acquisitions is part of the Business Analysis. **ASIAN ADHESIVES & SEALANTS** accurately portrays the industry in the identified countries, and provides critical insights into future developments.

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OUR QUALIFICATIONS

Kusumgar, Nerlfi & Growney is a consulting firm specializing in market research and business analysis for the polymer and chemical industries. Members of the firm possess some 70 years of experience analyzing the coating, ink, and adhesive & sealant industries. Kusumgar, Nerlfi & Growney is dedicated to providing comprehensive and accurate information and insight on technology driven markets.

The information and analyses contained in **ASIAN ADHESIVES & SEALANTS** was developed by Michael Growney, Minesh Kusumgar and Steven Nerlfi. No outside contractors were employed. Our expertise has been gained from conducting over 35 multiclient and numerous proprietary studies.

ADDITIONAL SERVICES

Kusumgar, Nerlfi & Growney's current multiclient project is **GLOBAL COATING & INK ADDITIVES**. The study will analyze five major additive types used in coatings and inks. The study will investigate the impact of the recent global slowdown on consumption and provide a forecast for future demand.

Our recently completed studies include **ASIAN PAINT & COATINGS** and **ASIAN COATING ADDITIVES**. Interested parties are invited to contact Kusumgar, Nerlfi & Growney for brochures and additional information. Brochures can be obtained at www.kusumgar-nerlfi-growney.com. We welcome inquires for projects of a proprietary nature.

SUBSCRIPTION INFORMATION

ASIAN ADHESIVES & SEALANTSS is available through subscription. The price of the study is \$12,000. Subscribers will receive 3 electronic copies (PDF) of the report. Additional copies are available upon request. To subscribe, please complete and sign the contract on the following page and return to Kusumgar, Nerlfi & Growney. For additional information please call Kusumgar, Nerlfi & Growney at 973/472-0300 (FAX: 973/472-0301) or e-mail us at nerlfikng@cs.com.

CONTRACT FOR ASIAN ADHESIVES & SEALANTS

KUSUMGAR, NERLFI & GROWNEY, INC.
21 Pine Street
Lodi, NJ 07644

Please initiate our participation in **ASIAN ADHESIVES & SEALANTS**. We understand our subscription entitles us to three electronic copies (PDF) of the final report.

We agree that for a period of three years from publication to:

1. Not reproduce the study, in whole or in part, by any means.
2. Restrict use of the study to our own employees.
3. Prevent the disclosure of its contents, to the best of our ability, to any other firm or person.

We understand that we may disclose the contents of this study to any firm that we own more than half of, or to a company that maintains more than a half interest in our firm. We may use or disclose any information in the study which is public knowledge, in our possession before receiving the report, or that has been obtained from third parties, but not from this study.

Kusumgar, Nerlfi & Growney will take reasonable precautions to prevent disclosure of the contents of this study, except to subscribers, for a period of three years after it is issued.

We understand the fee for **ASIAN ADHESIVES & SEALANTS** is \$12,000.

Kusumgar, Nerlfi & Growney will invoice us for the full amount upon acceptance of our participation, after a countersigned copy of this contract is returned to us for our records. We will pay this invoice within thirty days.

Accepted: Kusumgar, Nerlfi & Growney

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Date

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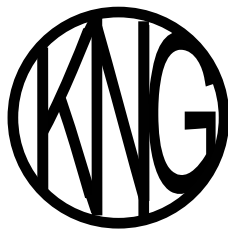
POLYMER AND CHEMICAL BUSINESS ANALYSIS AND MARKET RESEARCH

ADDITIONAL SERVICES

ASIAN ADHESIVES & SEALANTS is Kusumgar, Nerlfi & Growney's fifteenth multiclient study. Studies immediately available, or scheduled for completion, include:

- **ADHESIVES IN DEVELOPING REGIONS**, December 2003
- **ADDITIVES, 2003-2008**, September 2004
- **THE ASIAN COATINGS INDUSTRY**, September 2005
- **RADIATION-CURED PRODUCTS, 2005-2010**, July 2006
- **THE U.S. PAINT & COATINGS INDUSTRY, 2006-2011**, September 2007
- **ASIAN COATING ADDITIVES**, May 2008
- **ASIAN PAINT & COATINGS**, September 2008
- **GLOBAL COATING & INK ADDITIVES**, due year-end 2009

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