

Transparent Oxide-coated Films for Packaging

Global Markets, Technologies, and Economics
2007 to 2011

This global study from Allied Development Corp. was developed from a survey of producers of transparent oxide-coated films. These films are defined to include SiO_x - and AlO_x -coated films.

Nine of twelve global transparent oxide-coated film producers participated in the survey. The largest producers participated, and as a result, the survey accounts for 89% of total global production.

“Transparent Oxide-coated Films” provides informative tables, figures, and commentary on market segmentations including end-use, geographic region, coating type, coating processes, substrate type, and packaging format.

It also includes quantitative forecasts and commentary on competitive films including PVdC-coated films, *Besela* film from Kureha Chemical Co. Ltd. of Japan, *KURARISTER* film from Kuraray Co. Ltd. of Japan, *Aclar Flex* film from Honeywell of USA, and others.

With this new study you can:

- ◆ Understand the economic reality and potential of transparent oxide-coated films from five case studies and one comparative base case
- ◆ Envision the future of the global transparent oxide-coated films packaging industry through market projections and important technological innovations
- ◆ Understand why the growth of transparent oxide-coated films is continuing
- ◆ Learn which applications are generating growth now and those that will be generating growth in the future
- ◆ Find out how successful industry participants will utilize oxide-coated films in the years ahead



Transparent Oxide-coated Films for Packaging

Global Markets, Technologies and Economics

2007 to 2011

Expand your Network

Coating equipment manufacturers - Extensive profiles are provided for the major global suppliers of vacuum deposition equipment

Transparent oxide-coated film producers - Extensive profiles are provided for all twelve producers of transparent oxide-coated films

Allied Development Studies

Transparent Oxide-coated Films for Packaging was researched, written, and published by Allied Development Corp., of Burnsville, Minnesota U.S.A.

Other recent studies available from Allied Development Corp. include:

Oriented Films - Global Markets, Technologies, and Opportunities - a global study of the oriented films and sheet market with an emphasis on flexible packaging and labels

Pharmaceutical Packaging - Global Markets, Technologies, and Opportunities - an in depth analysis of the Global Pharmaceutical packaging industry

Retort Pouches - Global Markets, Opportunities, and Technologies - the definitive study of the global retort pouch industry, including technology, economics, and market analysis

Microwaveable Packaging - Technologies, Economics, and Markets - an in depth study of the North American Microwaveable packaging industry

Stick Pouches - Global Markets, Economics, and Technologies the first study dedicated to the stick pouch industry

Stand-up Pouches - Global Technologies, Markets, and Economics - an in depth study of stand-up pouches including volumes, trends, emerging competitive products, technologies, and economics

Medical Device Packaging - Global Technologies, Markets, and Economics - an in depth study of medical device packaging

Barrier Films and Coatings - Market Projections, Technologies, and Economics - a comprehensive global analysis of barrier materials used in flexible packaging

Flexible Lidstock Packaging - Markets and Technologies - a unique and in depth study of the NA flexible lidstock market

Brochures available at: www.allied-dev.com

Expand your Information Base

"Transparent Oxide-coated Films" includes 50 tables and figures detailing the market with projections and commentary on several market segmentations including end-use, coating type, coating processes, and others.

Illustrations of the equipment, coating processes, and the technology involved in producing transparent oxide-coated films are detailed in the Technology section

The Economic section includes five (5) economic case studies including analyses of transparent oxide-coated film production costs and comparisons of competitive barrier materials and structures

You will find unique benefits in this study that are available no where else:

- ➔ the results of an industry survey that accounted for more than 89% of global transparent oxide-coated film production
- ➔ economic case studies that calculate the cost of producing a variety of transparent oxide-coated films, all of which are benchmarked to the cost of metallizing
- ➔ market forecasts generated from a unique survey and a detailed, in-depth examination of the industry



ALLIED

TM

DEVELOPMENT

Packaging Consulting and Publications

Table of Contents

Section I:

Introduction

- A. Key definitions
- B. Study organization
- C. Geographic regions
- D. Study methodology
- E. Reading guidelines

Section II:

Executive Summary

- A. Definition
- B. Market surveys
- C. Market drivers
 1. Health and safety
 2. Environmental
 3. Performance
 4. Competitive response
 5. Economics
- D. Market forecasts
 1. Geographic segmentation
 2. End-use segmentation
- E. Technology
- F. Economics

Section III:

Technology

- A. Origins of transparent oxide-coated films
- B. Pretreatments
 1. Plasma pretreatment
 2. Primers
- C. Coating process and equipment
 1. CVD – plasma enhanced
 2. CVD – Combustion
 3. PVD evaporation
 4. Thermal evaporation
 5. Electron beam (EB) evaporation
 6. PVD sputtering
 7. Process summary
- D. Post-treatment
 1. Plasma post-treatment
 2. Additional coatings
 3. Further processing
- E. Materials
 1. SiO_x-coated films
 2. AlO_x-coated films
- F. Substrates
 1. Oriented polyester films
 2. BOPP and OPA
 3. Other
- G. Comparison of competing transparent barrier coatings
 1. Competing coatings
 2. Barrier property comparisons
 3. Processability comparison
 4. Summary
- H. Equipment suppliers
- I. Oxide-coated film suppliers
 1. SiO_x-coated films
 2. AlO_x-coated films
 3. Mix SiO_x/AlO_x-coated films

Section IV:

Economics

- A. Case introduction
- B. Base Case: Metallization
 1. Investment assumptions

2. Structure assumptions
3. Operating assumptions
4. Production cost results

C. Case Study 1: AlO_x-coated PET film

1. Investment assumptions
2. Structure assumptions
3. Operating assumptions
4. Production cost results

D. Case Study 2: SiO_x-coated PET film

1. Investment assumptions
2. Structure assumptions
3. Operating assumptions
4. Production cost results

E. Case Study 3: Retort pouch with aluminum foil

F. Case Study 4: Retort pouch with SiO_x-coated PET film

G. Case Study 5: Comparison of Case 3 and Case 4

1. Operating cost results
2. Profit margin
3. Overall cost results
4. Environmental results

Section V:

Market Trends and Projections

- A. Drivers and trends
 1. Health and safety
 2. Environmental
 3. Performance
 4. Competitive response
 5. Economics
- B. Projections and statistics segmented by end-use
 1. Packaging end-use – food
 2. Packaging end-use – healthcare
 3. Packaging end-use – personal care
 4. Packaging end-use – other
 5. End-use projection – all applications
- C. Projections and statistics segmented by geographic region
 1. Japan
 2. North America
 3. ROW
 4. Projection
- D. Projections and statistics segmented by coating type
 1. Current situation
 2. Projection
- E. Projections and statistics segmented by coating process
 1. Physical vapor deposition – electron beam (EB) evaporation
 2. Physical vapor deposition – thermal evaporation
 3. Chemical vapor deposition – plasma enhanced
 4. Combustion deposition
 5. Projection
- F. Projections and statistics segmented by substrate type
 1. Oriented polyester films
 2. BOPP
 3. OPA
 4. Projection
- G. Projections and statistics segmented by package format
 1. Pouches
 2. Lidstock
 3. Paperboard containers
 4. Projection

Section VI:

Producer Profiles

Section VII:

Equipment Profiles

Section VIII:

Glossary

Order Five Ways from Allied Development Corp.

CALL 1-952-898-2000
FAX Completed order form to:
1-952-898-2242
ONLINE www.allied-dev.com
EMAIL sales@allied-dev.com

MAIL Completed order form to:
Allied Development Corp.
2800 East Cliff Road Suite 140
Burnsville, MN 55337 U.S.A.

Ship To

Name _____
Title _____
Company Name _____
Street Address _____
City _____
State/Province _____
Country _____
Zip/Postal Code _____
Telephone _____
Fax _____
E-mail _____
Web Site _____

Allied Development Corp.
2800 East Cliff Road Suite 140
Burnsville, Minnesota, U.S.A. 55337
Telephone: 1-952-898-2000
Fax: 1-952-898-2242
Email: sales@allied-dev.com
Web address: www.allied-dev.com

Payment Information

Transparent Oxide-coated Films for Packaging Study

<input type="checkbox"/>	@US\$2,995 Single User License - PDF and Web Browser access)	\$ _____
<input type="checkbox"/>	@US\$2,995 Single User License - Hardcopy	\$ _____
<input type="checkbox"/>	@US\$4,795 Corporate License - PDF and Web Browser access)	\$ _____
<input type="checkbox"/>	@US\$4,795 Corporate License - Hardcopy	\$ _____
<input type="checkbox"/>	@US\$500 Each Additional Copy - Hardcopy	\$ _____
<input type="checkbox"/>	@ US\$500 Each Additional Copy - PDF	\$ _____
<input type="checkbox"/>	@US\$50 Each Additional Internet Access User Password	\$ _____
	Shipping & Handling Per Printed Copy (US\$50 in the U.S., US\$100 elsewhere)	\$ _____
	TOTAL :	\$ _____

Payment Method

- Payment Enclosed (Payable to Allied Development Corp. in U.S. funds on a U.S. Bank)
- Charge my credit card
- VISA MasterCard American Express

Card number _____ Expiration date _____

Name on card _____

Signature _____



ALLIED

TM

DEVELOPMENT

Packaging Consulting and Publications