



The Solution in Energy Curing

Miwon Specialty Chemical Co., Ltd.

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The Solution in **Energy Curing**

Miwon Specialty Chemical Co., Ltd., supplies Acrylate & Methacrylate Monomers, Oligomers, and Photoinitiators which are fundamental raw materials for UV/EB and peroxide curing systems for Coatings, Printing Inks, Electronics, Adhesives, Rubbers, and a variety of other applications to customers on a global basis. In addition to these main products, we also manufacture and provide diverse products including additives for powder coating systems, epoxy diluents, etc.

Miwon Specialty Chemical Co., Ltd. is dedicated to our customers' growth and profitability, as a sincere partner of customers and to supply the best solution for the customers with a environmental and innovative technology, the best quality, and broad range of products as a true global leading company of Energy curing field.



Miwon Key Facts

Vision: To be the Global Leader in Energy Curing

- ◆ **Product Lines:** Acrylate & Methacrylate Monomers, Oligomers, Phtoinitiators & Other Specialties
- ◆ **Turnover** U\$ 100 Million (2009)
- ◆ **Total Assets** U\$ 55 Million (Dec. 31st, 2009)
- ◆ **Total Debt** U\$ 12 Million (Dec. 31st, 2009)
- ◆ **Own Capital** U\$ 43 Million (Dec. 31st, 2009)
- ◆ **Employees** 202 (March 31st, 2010)
- ◆ **Public Listed in Korea Stock Exchange Market**

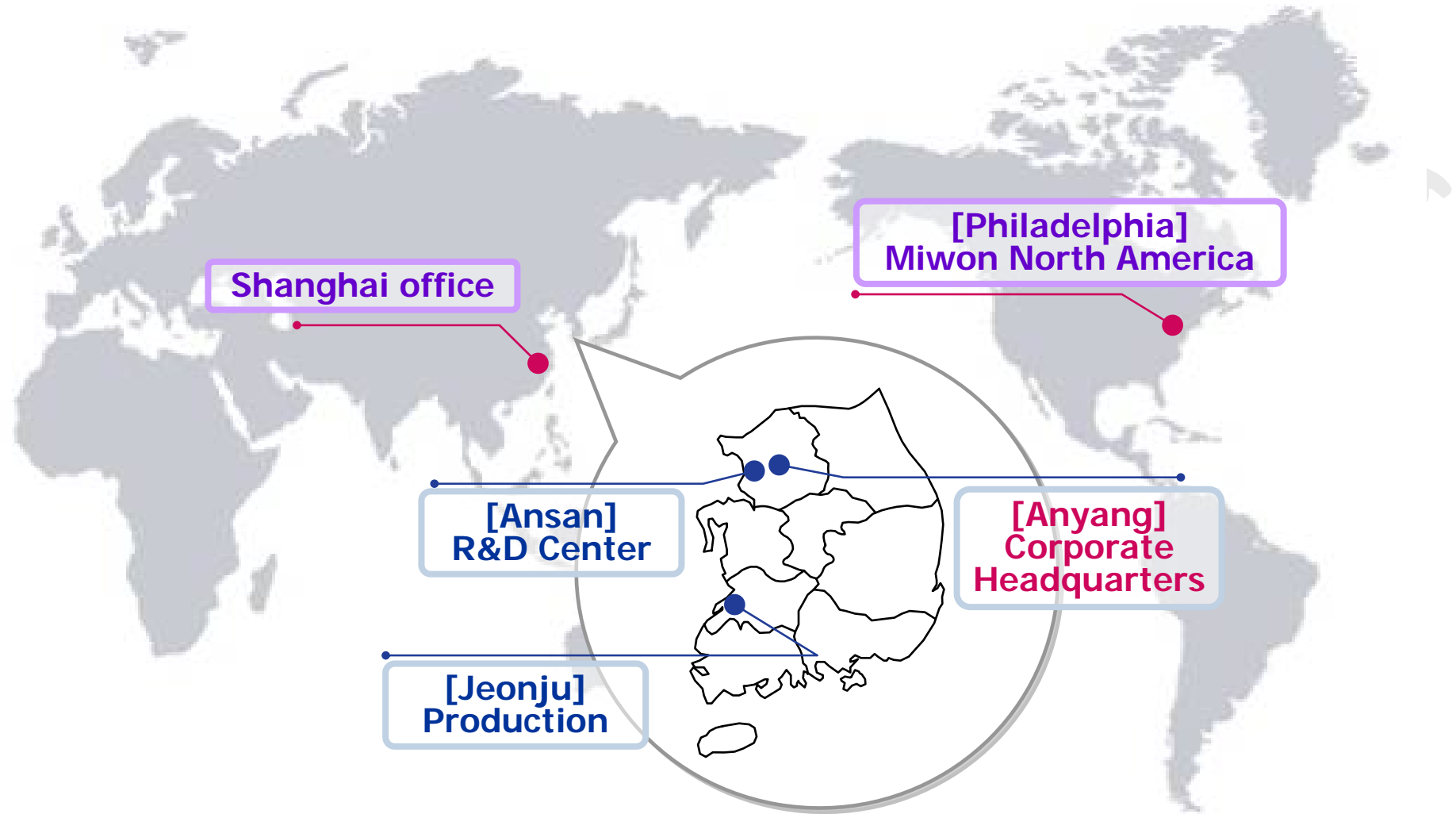
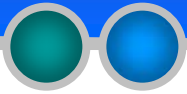


Business History

- **Nov. 1959** Established Miwon Commercial Co., Ltd
- **Apr. 1983** Started Photoinitiator Production in Banwol Plant
- **Feb. 1989** Started Monomer Production in Banwol Plant
- **Mar. 1995** Constructed Jeonju Plant / moved Monomer production
- **Sep. 1996** Established Hanyoung sales office (China)
- **May. 1999** Acquired ISO9001:1994 Certification
- **Mar. 2000** Set R&D center in Banwol Plant
- **May. 2000** Started Oligomer Production in Jeonju Plant
- **Oct. 2003** 1st Expansion of MONOMER capacity
- **Mar. 2007** 2nd Expansion of MONOMER capacity
- **Oct. 2007** Established Miwon North America Inc. (USA)
- **May. 2008** Renewed ISO9001:2000 Certification
- **Sep. 2008** 3rd Expansion of MONOMER capacity
- **Feb. 2009** Split off from Miwon Commercial Co., Ltd.
Established Miwon Specialty Chemical Co., Ltd
- **Nov. 2009** 4th Expansion of MONOMER capacity



Work Site Map



Work Site Features

Corporate Headquarters



■ Anyang, Gyeonggi, Korea
Executives, Sales,
Purchasing, HR&Finance

R&D Center



■ Ansan, Gyeonggi, Korea
Research and Development

Production



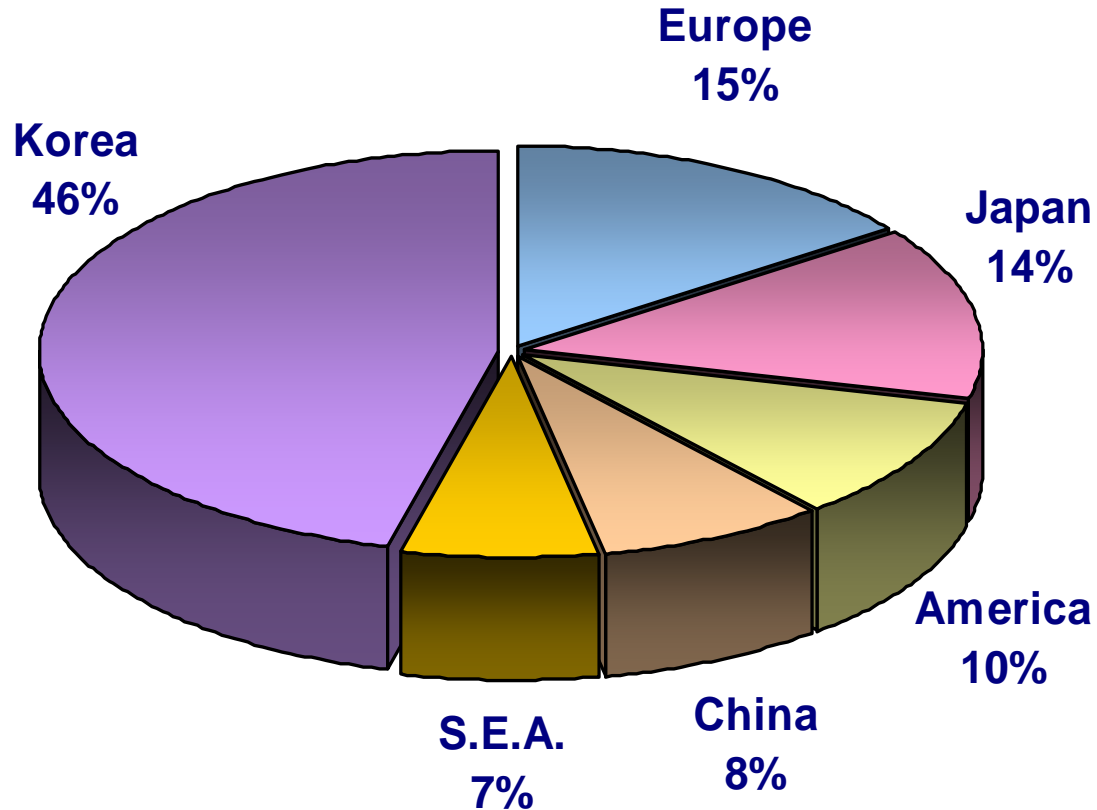
■ Jeonju, Jeonbuk, Korea
Monomer
Oligomer
Other Specialties



Miwon Specialty Chemical Co., Ltd.

Sales by Region

[Based on 2009 Sales]



Turnover : USD 100 Mil.



Miwon Specialty Chemical Co., Ltd.

Application

Acrylates monomers and Oligomers are largely used in Industrial Coatings, Printing Inks, Adhesives, Fiber Optics and Electronics in UV/EB curing systems, which provide energy saving, high productivity, excellent chemical resistance and environmentally friendly processes.



Application

➤ Industrial Coatings

■ Wood

Flooring, Furniture



■ Plastic

Mobile phone, Cosmetic case,
Photographic films, PVC flooring/tiles,
Automotive head lamp



■ Metal

Beverage cans, Metal tubes



Application

➤ Optics

Optical Fibers, CD/ DVD/BluRay



➤ Printing Inks

OPV (Magazines, Shopping bags),
Lithographic, Letter press,
Flexographic, Screen printing,
Gravure



➤ Adhesives

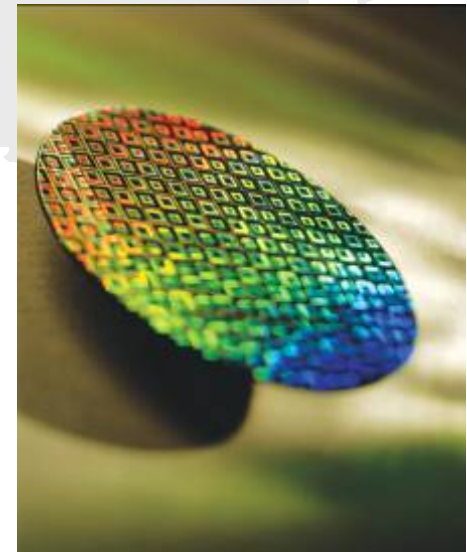
Pressure sensitive labels, Plastic component assembly



Application

➤ Electronics

Dry film resists, Printing plates, Functional films,
Prism Sheets, Color filter resists,
Encapsulation of electronic components



Application

Methacrylates are largely used in Peroxide curing systems as a crosslinker, and used in various polymerization processes.

- Textile adhesives
- Latex polymerization
- Oil modification
- Artificial marble
- Water repellent coatings
- Dental fillings
- Rapid phototyping resins



Product – “Miramer”

➤ Monomer

- Acrylates
- Methacrylates

➤ Oligomer

- Urethane
- Epoxy
- Polyester
- High RI
- Silicone
- WS/WB
- Dendritic
- Adhesion promoter

➤ Other Specialties

- Photoinitiators
- Amine synergists
- Sucrose Benzoate
- Epoxy Diluents
- Powder coating additives



Production

- **Jeonju Plant**
Total area: 50,047m²
Employees: 133
- **Production I**: Monomers, Oligomers, Epoxy Diluents
- **Production II**: Powder Coating Additives, etc.





◆ QA(Quality Assurance) Section

- Corrective and Preventive Action
- Internal Quality Audits
- Continuous updating ISO procedures

◆ QC(Quality Control) Section

- Inspection and Testing
- Calibration of analytical instruments
- SQC Data



Miwon Management System



MBO

ERP System

Management System

R&D
Activities

- Inspection and Testing (Receiving, In-Process & Final)
- Performing Inspection, Measuring and Testing
- SQC Data

Safety &
Environment

- Keep Environment Standard
- Pollution Prevention
- Employee Health & Safety
- Process Safety
- Community Awareness

Quality
Assurance

- ISO 9001 Certification
- Process Capability Analysis
- Quality Audit
- On-time delivery & customer service



Global Sales Contacts

❖ America

Robert O'Toole (rotoole@mwc.co.kr)

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Rahn USA - US Distributor

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Toyo Chemical – Distributor



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Agents by Country

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Thank You !

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