

MANAGEMENT SYSTEM CERTIFICATE

Certificate No:
103328-2011-AE-KOR-RvA

Initial certification date:
17 October 2011

Valid:
28 July 2016 - 28 July 2019

This is to certify that the management system of

Lotte Advanced Materials Co., Ltd. Yeosu Plant

334-27, Yeosusandan-ro, Yeosu-si, Jeollanam-do, Korea
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Energy Management System standard:
ISO 50001:2011

This certificate is valid for the following scope:

Design & Development, Production and Servicing of ABS(Acrylonitrile Butadiene Styrene), ASA(Acrylate Styrene Acrylonitrile), PS(Poly Styrene), SAN(Styrene Acrylonitrile), EPS(Expandable Poly Styrene), LD(Light Diffuser), EP(Engineering Plastics), SS(Solid Surface), S&B(Sink & Bowl), PC(Poly Carbonate) and Engineered Stone(Quartz Surface).

Place and date:
Barendrecht, 7 July 2016



For the issuing office:
**DNV GL – Business Assurance
Zwolseweg 1, 2994 LB, Barendrecht,
Netherlands**

D.P. Koek
Management Representative



Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV GL Business Assurance B.V., ZWOLSEWEG 1, 2994 LB, BARENDRECHT, NETHERLANDS. TEL:+31102922689. assurance.dnvgl.com

Certificate No: 103328-2011-AE-KOR-RvA
Place and date: Barendrecht, 7 July 2016

Appendix to Certificate

Lotte Advanced Materials Co., Ltd. Yeosu Plant

Locations included in the certification are as follows:

Site Name	Site Address	Site Scope
Lotte Advanced Materials Co., Ltd. Yeosu Plant	334-27, Yeosusandan-ro, Yeosu-si, Jeollanam-do, Korea	Design & Development, Production and Servicing of ABS(Acrylonitrile Butadiene Styrene), ASA(Acrylate Styrene Acrylonitrile), PS(Poly Styrene), SAN(Styrene Acrylonitrile), EPS(Expandable Poly Styrene), LD(Light Diffuser), EP(Engineering Plastics), SS(Solid Surface), S&B(Sink & Bowl), PC(Poly Carbonate) and Engineered Stone(Quartz Surface).
Lotte Advanced Materials Co., Ltd. Uiwang R&D Center	56, Gosan-ro, Uiwang-si, Gyeonggi-do, Korea	Design & Development and Servicing of Styrene Resin (ABS, ABS Alloy, ASA, EPS), Engineering Plastics (PC, PC Alloy, PBT, mPPE, PA, PPA, PPS, PCT), Acrylic solid surface, Engineered Stone(Natural quartz).

MANAGEMENT SYSTEM CERTIFICATE

Site certificate No.:
103328CC1-2011-AE-KOR-RvA

Initial certification date:
17 October 2011

Valid:
28 July 2016 - 28 July 2019

Belongs to Central Office Certificate No:
103328-2011-AE-KOR-RvA

This is to certify that the management system of

Samsung SDI Co., Ltd. **Uiwang R&D Center**

56, Gosan-ro, Uiwang-si, Gyeonggi-do, Korea

has been found to conform to the Energy Management System standard:

ISO 50001:2011

This certificate is valid for the following scope:

Design & Development and Servicing of Styrene Resin (ABS, ABS Alloy, ASA, EPS), Engineering Plastics (PC, PC Alloy, PBT, mPPE, PA, PPA, PPS, PCT), Acrylic solid surface, Engineered Stone(Natural quartz).

Place and date:
Barendrecht, 07 July 2016



For the issuing office:
DNV GL – Business Assurance
Zwolsseweg 1, 2994 LB, Barendrecht,
Netherlands

D.P. Koek
Management Representative



Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV GL Business Assurance B.V., ZWOLSEWEG 1, 2994 LB, BARENDRECHT, NETHERLANDS. TEL: +31102922689. assurance.dnvgl.com

MANAGEMENT SYSTEM CERTIFICATE

Site certificate No.:
103328CC2-2011-AE-KOR-RvA

Initial certification date:
17 October 2011

Valid:
28 July 2016 - 28 July 2019

Belongs to Central Office Certificate No:
103328-2011-AE-KOR-RvA

This is to certify that the management system of

Lotte Advanced Materials Co., Ltd. Yeosu Plant

334-27, Yeosusandan-ro, Yeosu-si, Jeollanam-do, Korea

has been found to conform to the Energy Management System standard:
ISO 50001:2011

This certificate is valid for the following scope:

Design & Development, Production and Servicing of ABS(Acrylonitrile Butadiene Styrene), ASA(Acrylate Styrene Acrylonitrile), PS(Poly Styrene), SAN(Styrene Acrylonitrile), EPS(Expandable Poly Styrene), LD(Light Diffuser), EP(Engineering Plastics), SS(Solid Surface), S&B(Sink & Bowl), PC(Poly Carbonate) and Engineered Stone(Quartz Surface).

Place and date:
Barendrecht, 07 July 2016



For the issuing office:
**DNV GL - Business Assurance
Zwolsseweg 1, 2994 LB, Barendrecht,
Netherlands**

D.P. Koek
Management Representative