

# CERTIFICATE OF APPROVAL

## LG Chem, Ltd.

- Head Office : 128, YEOUNI-DAERO, YEONGDEUNGPO-GU, SEOUL, KOREA
- SITE : Refer to the Appendix



**Korean Standards Association hereby certifies that the Energy Management System of the above organization has been assessed and found to meet the requirements of the standard and scope of certification detailed below:**

CERTIFICATION No. EnMS-0010

STANDARD ISO 50001:2018

#### SCOPE OF CERTIFICATION

Design, Development and Production of Petrochemicals,  
Information Technology & Electronic Materials, Advanced Materials,  
Pharmaceutical and Fine Chemical

VALID FROM 24 November, 2020

VALID TO 23 November, 2023

Original Certification Date : 24 November, 2014

\* This certificate is reissued due to the change of the certification scope and the addition of sites

Date of Issue : 11 October, 2022

PRESIDENT OF KSA

## KOREAN STANDARDS ASSOCIATION

5, Teheran-ro 69gil, Gangnam-Gu, Seoul, Korea

# KSA



(KAB-EN-03)



KSA has been accredited by Korea Accreditation Board(KAB)  
as an ISO 50001 Certification body.(Accreditation Number : KAB-EN-03)

# APPENDIX

THIS APPENDIX SPECIFIES THE SCOPE OF CERTIFICATION GRANTED TO :

CERTIFICATION No : EnMS-0010

**LG Chem, Ltd.**



● **Head Office : 128, YEOUNI-DAERO, YEONGDEUNGPO-GU, SEOUL, KOREA**

• Design, Development and Production of Petrochemicals, Information Technology & Electronic Materials, Advanced Materials, Pharmaceutical, and Fine Chemical.

● **Cheongju Complex : 765, 2SUNHWAN-RO, HEUNGDEOK-GU, CHEONGJU-SI, CHUNGCHONGBUK-DO, KOREA**

• Production of Protective Film, TPF(Temporary Protect Film), FSPM(Face Seal PSA Metal), CCL(Copper Clad Laminate), B/S(Bonding Sheet), Photoresist Materials, OLED Materials (ETL, EML, HTL, etc.) - confidential, Cathode Material for Lithium-ion Batteries, Reverse Osmosis (RO) membranes.

● **Daesan Complex : 54, DOKGOT 1-RO, DAESAN-EUP, SEOSAN-SI, CHUNGCHONGNAM-DO, KOREA**

• Production of monomer products including ethylene, propylene, benzene, toluene, mixed xylene, butadiene, ethylene glycol, ethylene oxide, methyl tertiary butyl ether, butene-1, bisphenol A(BPA), acetone, phenol and vinyl chloride monomer, polymer products including low density polyethylene, ethylene vinyl acetate, linear low density polyethylene, wire & cable polyethylene, high density polyethylene, polypropylene poly vinyl chloride and polyolefinelastomer, synthetic rubber products including butadiene rubber, solution styrene-butadiene rubber, acrylonitrile butadiene rubber and styrene butadiene rubber, automotive materials products including thermoplastic polyether-ester elastomer(TPEE), catalyst products including inorganic catalyst and precursor/chemical.

● **Iksan Plant : 99, SEOGAM-RO, IKSAN-SI, JEOLLABUK-DO, KOREA**

• Compounding of Synthetic Resins(ABS, Engineering Plastics).

11 October, 2022

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● **Naju Plant : 54, NAJU-RO, NAJU-SI, JEOLLANAM-DO, KOREA**

• Production of Alcohol Products(2-EH, N-BuOH, I-BAL), Acrylic Acid & Esters Products(AA, 2-EHA), Plasticize Products(LGflex GL300, LGflex GL500, LGflex GL520, LGflex TOTM, LGflex TOTMS, LGflex GL515T, LGflex BL100), Pressure-Sensitive Adhesive Products[Acrylic Resin for Polarizer film(AD-701, AD-705), Acrylic Resin for P-film Products (AD-505N, AD-507), Binder for Battery(AD-B02, AD-B21, AD-B22, AD-B32, AD-B81, AD-B82, AD-B83), UV-Photoinitiators(AD-PI2)], Catalyst Products[Acrylic Acid 1st(CAA FS catalyst, CAA FM catalyst, CAA FL catalyst), Acrylic Acid 2nd(CAA SS catalyst, CAA SM catalyst, CAA SL catalyst), Methacrylic acid(MACF catalyst, MACR catalyst, MACS catalyst)].

● **Yeosu Complex : 55, YEOSUSANDAN 2-RO, YEOSU-SI, JEOLLANAM-DO, KOREA**

• PVC Plant-Design and Production of Synthetic Resin(PVC). ABS/EP Plant-Design and Production of Synthetic Resin(ABS, ASA, Acrylic Products, PS, EPS, SAN). Production of Poly Butylene Terephthalate(PBT) and PolyCarbonate. Specialty Polymers Plant-Design and Production of Synthetic Resin(SBL, NBL, MBS, SBS).•PE Plant-Production of LDPE, HDPE and PE Compound. •VCM Plant-Production of Vinyl Chloride Monomer(VCM), Sodium Hydroxide(NaOH), Sodium Hypo Chlorite(NaOCl), Ethylene Dichloride(EDC), Hydrochloric Acid(HCl), Hydrogen Gas(H<sub>2</sub>), Phthalic Anhydride(PA), Dimethyl Ether(DME), Diethyl Ether(DEE) and Carbon Nano Tube (CNT).•AA/SAP Plant-Design and Production of Super Absorbent Polymer(SAP), PolyCarboxylate Ether(PCE), Production of Acrylate Chemical(AA, BA, MA), ISO Propyl Alcohol(IPA), 2-Ethyl Hexanol(2EH), ISO Butylaldehyde(I-BAL), Normal Butylaldehyde(N-BAL), Ethyl Acrylate(EA), 2-Ethyl Hexyl Acrylate(2-EHA), Acetic Acid(AcOH) and Neo Pentyl Glycol(NPG) (Extended Scope).•NCC Plant-Production of ethylene, propylene, benzene, toluene, mixed xylene, butadiene, styrene monomer, pentane (iso pentane, normal pentane, cyclo pentane).•BPA/PC Plant-Production of Bisphenol A(BPA), Phenol, Acetone, Alpha Methyl Styrene(AMS), LPE90, Polycarbonate(PC).

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- **Gimcheon Plant 152-26, GONGDAN-RO, GIMCHEON-SI, GYEONGSANGBUK-DO, KOREA**
  - Design, Development, Production and sales of Super Absorbent Polymer.
- **Industrial Materials Iksan Plant : 69, BOSEOK-RO 4-GIL, IKSAN-SI, JEOLLABUK-DO, KOREA**
  - Production of battery materials.
- **Life Sciences Iksan Plant : 129, SEOGAM-RO, IKSAN-SI, JEOLLABUK-DO, KOREA**
  - Research and Development of Petrochemicals & Polymers, Future Engine Growth, Information Technology & Electronic Materials and Battery.
- **Onsan Plant : 19, IJIN-RO, ONSAN-EUP, ULJU-GUN, ULSAN, KOREA**
  - Design, Development, Production and sales of agrochemicals, fine chemical, pharmaceutical, intermediates, food additives and animal nutrition.
- **Osong Plant : 151, OSONGSAENGMYEONG 1-RO, OSONG-EUP, HEUNGDEOK-GU, CHEONGJU-SI, CHUNGCHEONGBUK-DO, KOREA**
  - Production of pharmaceutical products (Biomedicine, Oral Solid Dosage, Diagnostics).
- **Cheongju Complex(Separator) : 93, 2SUNHWAN-RO 971BEON-GIL, HEUNGDEOK-GU, CHEONGJU-SI, CHUNGCHEONGBUK-DO, REPUBLIC OF KOREA**
  - Production of SRS(Safety Reinforced Separator)

11 October, 2022