



HANWHA CHEMICAL
POLYOLEFIN BUSINESS UNIT

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Korea

Product Regulatory Information Sheet

LDPE

Hanwha LDPE Grades :

Classification	Grade
Film	5301, 5302, 5303, 5305, 5602, 5320, 5321, 5316, 5312P, 5306, 5310, 5325,
Extrusion Coating	950, 955, 961, 963, 951
Medical applications	5301
Blow Molding	5602S
Injection Molding	749, 303, 724, 737
Foam	5316F, 5318, 5321F, 5322F
W&C	800, 820, 830

Product Manufacturer :

This product, Low Density Polyethylene, LDPE is manufactured by Yeosu Plant in Hanwha Solutions/Chemical.

LDPE 303, 724, 737 are manufactured by Ulsan Plant in Hanwha Solutions/Chemical.

REACH (Regulation (EC) No. 1907/2006)

Substances of Very High Concern (SVHC)

Hanwha LDPE is not manufactured or formulated with any of the candidate chemical substances proposed to be Substance of Very High Concern (List dated June 20, 2016) as stated in REACH (Regulation No. 1907/2006).

Chemical Inventories :

All ingredients in this product, LDPE is in compliance with the following chemical inventories :

- United States : TSCA - Toxics Substances Control Act Inventory
- Canada : DSL - Domestic Substances List
- Europe : EINECS/ELINCS replaced by REACH
- Australia : AICS - Australia Inventory of Chemical Substances
- New Zealand : NZIoC - New Zealand inventory of Chemicals
- Korea : KECL - Korean Existing Chemicals List
- Japan : ENCS - Japanese Inventory of Existing and new Chemical Substances
- The Philippines : PICCS - Philippines Inventory of Chemicals and Chemical Substances
- China : IECSC - Inventory of Existing Chemical Substances Manufactured or Imported in China

Food Contact :

Hanwha LDPE complies with U.S. FDA regulation 21 CFR 177.1520 (c) 2.1.

Hanwha LDPE complies with following EU Regulations on Food Contact Materials (FCM).

- (EC) No 1935/2004 - Food Contact Materials Regulations
- (EC) No 10/2011 - European Commission Regulation (2018/831, 2019/37, 2019/1338, 2020/1245, 2023/1627)
- 94/62/EC – EU Directive on Packaging and packaging waste

Hanwha LDPE complies with German Food, Articles of daily use and feed code of September 1, 2005 (LFGB), Section 31.

Hanwha LDPE complies with German Food, Articles of daily use and feed code of September 1, 2005 (LFGB), Section 30, European Commission Regulation (EU) No 10/2011 and BfR recommendation.

Hanwha LDPE complies with European Commission Regulation (EU) No 10/2011
This product complies with China GB 9685-2008.

Heavy Metals, RoHS

Hanwha LDPE complies with the following legislation.

- 2002/95/EC (RoHS) as amended by 2008/385/EC.
- US CONEG Model Legislation for requirement regarding the define limit for the sum of heavy metals.
- CALIFORNIA'S PROPOSITION 65 LEAD PROTOCOL.

Other Legislation

Hanwha LDPE complies with the following legislation.

- Directive 2012/19/EU, WEEE - Waste Electrical & Electronic Equipment.
- ANIMAL ORIGIN. Compliance with the requirements specified in the 'Note for Guidance on minimizing the risk of transmitting animal spongiform encephalopathy agents via human and veterinary medicinal products' (EMA/410/01 Rev.3 – July 1, 2011).
- Regulation 2017/821 about conflict minerals.

Absence of Substances and Chemicals

The following substances are not used in the manufacture of or formulation of this product. We hereby certify that the chemical materials in the list below have not been intended to use during the product's manufacture.

- Acrylamide
- Alcohol derivates / tert-Butyl alcohol
- Alkylphenol Ehtoxylates, including nonylphenol ethoxylate and octylphenol ethoxylate
- Allergens (i.e., peanuts, tree-nuts, milk, eggs, wheat gluten, soy, fish, and shellfish)
- Antimony(Sb) and Antimony compounds
- Arsenic(As) and Arsenic compounds / Nickel(Ni)
- Amines / Aromatic amines / Asbestos / Azo compounds / Dioxins
- Benzophenone derivates
- Beryllium and Beryllium compounds
- Biocides
- Bisphenol compounds, BPA, BPB, BPC, BPE, BPF, BPS, BPZ
- BHT - Butylated Hydroxytoluene, and BHA - Butylated Hydroxyanisole
- Bumetizole
- Butylparaben
- Cadmium and Cadmium compounds
- Chlorofluorocarbons (CFCs) or Hydrochlorofluorocarbons (HCFCs)
- Chlorinated praraffins
- Copper and Copper compounds
- Colorants or Pigments
- Dimethylfumarate (DMF)

- Disodium tetraborate, anhydrous
- Endocrine disruptors
- Epoxy derivatives listed in EU Directive 2002/16/EC
- Ethylene Bis Stearamide
- Formaldehyde
- GMOs - Genetically-modified Organisms
- Halogenated (Brominated or chlorinated) or phosphorous base flame retardants
- HBCD - Hexabromocyclododecane
- HCBD - Hexachlorobutadiene
- Imidazole derivates
- Materials derived from animal sources
- Melamine / Methyl bromide / Bromochloromethane
- Mercury and Mercury compounds
- Methylchloroisothiazolione
- Methyl Chloroform
- Molybdenum trioxide
- Natural rubber latex and dry natural rubber
- Nitrocellulose
- NDEA – N-Nitrosodiethylamine / Nitrosoamine
- NDMA – N-Nitrosodimethylamine / Nitrosoamine
- NMBA – N-Nitrosomethylaminobutyric acid / 4-[Methyl(nitroso)amino]butanoic acid
- Nonyl phenol / Toluene / Phthalates
- Organo-Tin Compounds / Tributyl Tins(TBT) / Triphenyl Tins(TPT)
- Ozone-depleting chemicals
- Polyaromatic Hydrocarbons (PAHs) listed in Regulation 1907/2006/EU Annex XVII(1272/2013/EC)
- PBDEs - Polybrominated Diphenyl Ethers / Cyclopentyl methyl ether / Decabromodiphenyl ether
- PCBs and PBBs - Polychlorinated and Polybrominated Biphenyls
- PCN – Polychlorinated naphthalenes
- PCTs and PBTs - Polychlorinated and Polybrominated Terphenyls
- PCTP - Pentachlorothiophenol
- PFAS – Perfluoroalkyl and Polyfluoroalkyl Substances
- PFHXA and PFBS– Perfluorohexanoic Acid and Perfluorobutanesulfonic Acid
- PFOA and PFOS - Perfluorooctanoic Acid and Perfluorooctane Sulfonates

- Phenol, isopropylated phosphate (3:1) (PIP (3:1))
- Phthalates/ Phthalate esters
- PVC/PVDC (polyvinylchloride/polyvinylidene chloride)
- Radioactive Substances
- Silicon and mineral oils
- Sodium Chromate, Potassium Chromate, Ammonium Dichromate, Potassium Dichromate
- Styrene
- Sulfonamides
- TBBPA - Tetrabromobisphenol A
- THF – Terahydrofuran / 2-Methyltetrahydrofuran
- Thiuram mix
- Trichloroethylene / Boric acid
- Tris-Nonylphenol Phosphite
- Tetraboron disodium heptaoxide, hydrate
- VCM and PVC – Vinyl Chloride Monomer, and Polyvinyl Chloride
- Xylene
- 1,4-Dioxane
- 2,4,6-TTBP - 2,4,6-Tri-tert-butylphenol

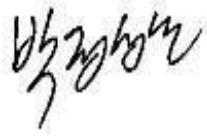
This Product Regulatory Information Sheet is intended for informational purposes only.

It is the responsibility of the customer to check compliance of the final articles with the relevant legislative and applicable regulatory requirements including their restrictions.

The Producer, Hanwha Solutions makes no representations or warranties with respect to the accuracy or completeness of the information contained herein. Determination of the suitability and fitness of the specific product and/or material for any particular application is the sole responsibility of the purchaser.

Additional Information on the Health and Safety views of Our Product is listed in the MSDS of the Product.

Certified for Hanwha by :



KSM Park

General Manager – Quality Assurance Team in Yeosu Plant

Product Stewardship & Regulation affairs : Tel +82-61-688-1610

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This certificate shall continue in effect for 1 year from its effective date.

Producer : Hanwha Solutions/Chemical, Polyolefin Business Unit.

(Effective Date : 2 January, 2024)