

The background features a dense pattern of overlapping circles in various shades of pink and light red. Scattered throughout this pattern are small, stylized icons of laboratory glassware, including beakers, flasks, and bottles in colors like blue, orange, and pink. In the center of the image is a large white circle containing text.

Beautiful Healthy Refreshing
for people and the planet

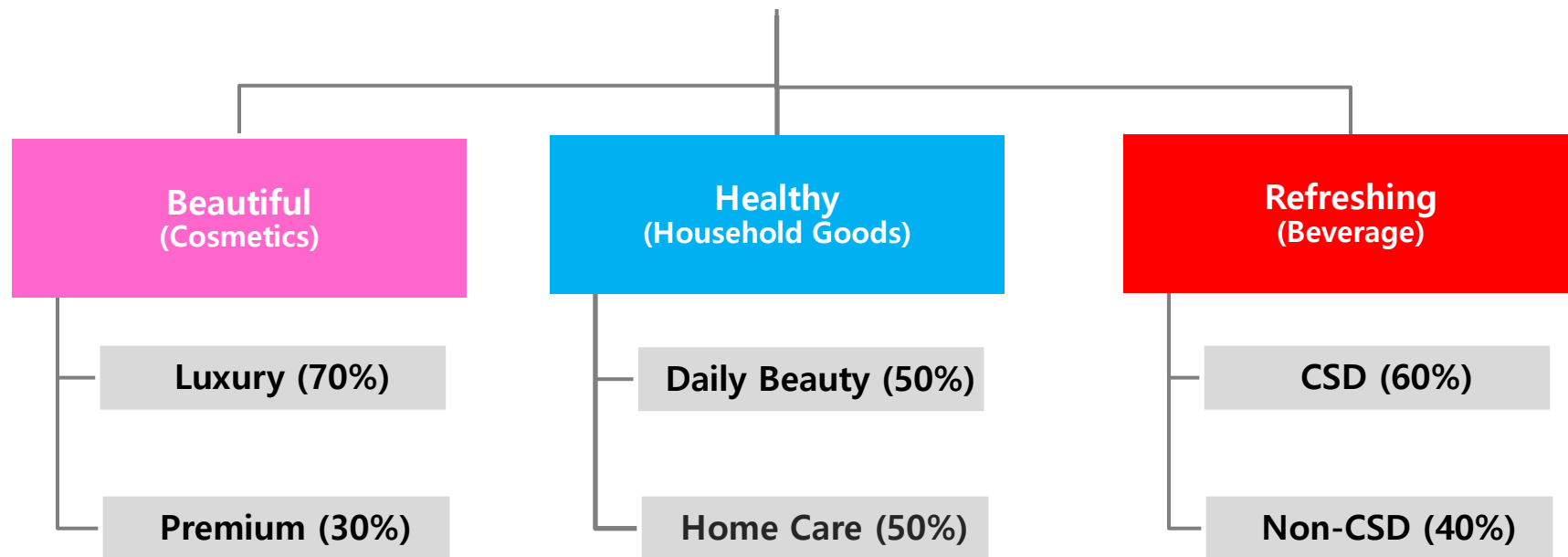
LG H&H
Chemicals Business

July 2020



Founded in 1947, LG Household & Health Care, as the first company of LG Group, is the Korea's leading company in Fast Moving Consumer Goods industry

LG H&H





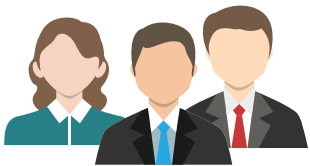
> History of the Company & Research Institute

[Brief History]

- 1947** Started as "Lucky Chemical Engineering Company"
- 1979** Established "Daejeon Lucky Central Research Institute"
- 2001** Changed to "LG Household & Health Care"
- 2018** Research Institute moved into Magok LG Science Park
- 30%** Proportion of investment in future technologies ('18)
- 820** Number of R&D personnel('18)



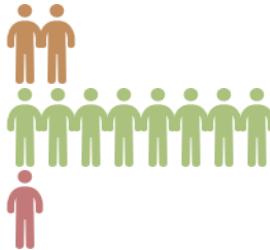
[R&D Employee]



Bachelor's(21%)

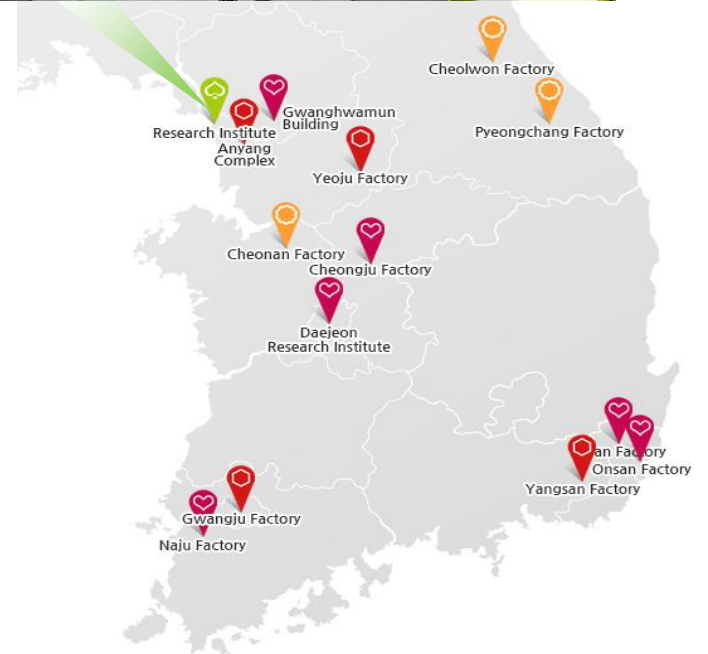
Master's(69%)

Doctor's(10%)



Male(49%)

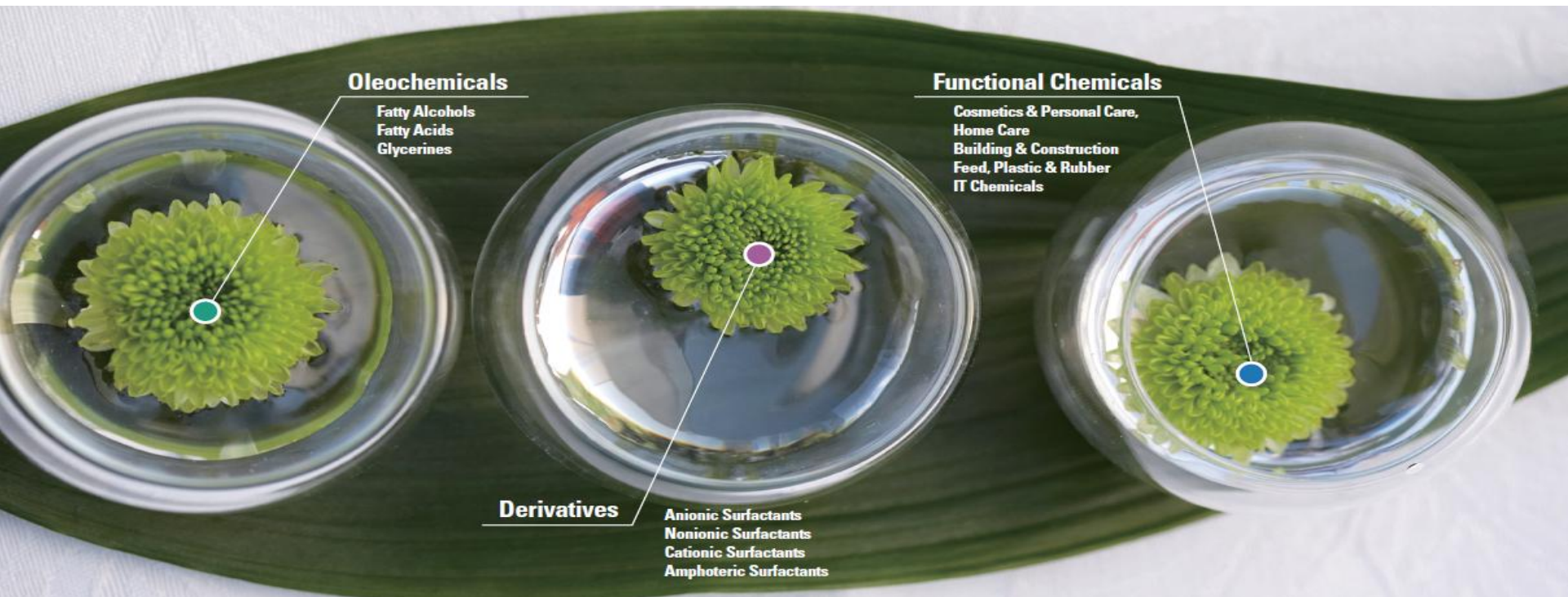
Female(51%)





> Chemicals Business Portfolio

We have been leading the **oleochemical market** for over a half century since the production of **glycerin** began in 1960. Based on our accumulated technologies, we built a **surfactant production** site in Korea in 1983. We established a joint venture for a fatty alcohol production site in Malaysia in 1992 which led us to broaden our business portfolio. We have diversified our business portfolio into such areas as **fatty alcohols, fatty acids, surfactants, industrial cleaners, and functional chemicals.**





> History of Chemicals Business

- 1947. 03* Established as Lucky Chemical Industrial Co, beginning to produce LUCKY facial cream
- 1960. 01* Oil plant in Busan established, starting to produce glycerin
- 1981. 01* Moved from Busan to Ulsan, producing fatty acid and glycerin
- 1983. 04* Stearic acid capacity expansion accomplished
- 1983. 07* Surfactant plant completed in Onsan
- 1992. 01* Fatty alcohol Joint venture in Malaysia established
- 1995. 02* Corporate name changed to LG Chemical, Ltd.
- 2001. 01* JV fatty alcohol capacity expansion,
New batch process for surfactant accomplished in Onsan
- 2001. 04* LG Household & Health Care spin off from LG Chemical, Ltd
- 2005. 12* New production line for oleic acid, cationic surfactants and EBS accomplished in Ulsan
- 2009. 07* AG(Milcoside) plant completed in Onsan
- 2011. 08* AG/SLES production capacity expansion in Onsan
- 2012. 04* Cationic surfactant capacity expansion in Ulsan
- 2014. 06* Refined Glycerine capacity expansion in Ulsan
- 2014. 10* RSPO Supply chain certification achieved for Segregation & Mass Balance



Fatty Alcohols ELOCOL[®]

- Fractionated Fatty Alcohol
- Broad-cut Fatty Alcohol
- Blended Fatty Alcohol

Glycerines ELOGLYN[®]

- Refined Glycerin
- Distilled Glycerin

Fatty Acids ELOFAD[®]

- Distilled Fatty Acid
- Hydrogenated Fatty Acid
- Partially Hydrogenated Fatty acid
- Fractionated Fatty Acid



Anionic Surfactants ELOTANT®

- Alkyl Benzene Sulfonic Acid
- Alkyl Sulfate
- Alkyl Ether Sulfate
- Alkyl Poly Glycoside Derivative
- Potassium Cocoyl Glycinate

Nonionic Surfactants ELOTANT®

- Alkyl Poly Glycoside : MILCOSIDE series
- Polyoxyethylene Akyl ether
- Alkanol Fatty Amide
- Nonionic Surfactant Blend : ECOLOF, CONSPM series

Cationic Surfactants ELOTANT®

- Ester Quat

Amphoteric Surfactants

- Coco Amido Propyl Betaine



> **Product III – Functional
chemicals**

Plastic & Rubber ELOFER[®] ELOPLA[®] **Cosmetics & Personal Care** ELOPERS[®]

- Plasticizer
 - Emulsifiers
 - Lubricant
- Emulsifier
 - Humactant
 - Ceramide
 - Opacifying Agent
 - Rheology Modifying Agent
 - Solubilizer
 - Soap chips
 - Cosmetic Cleaning Agent



> Emulsifiers & Lubricants

LG H&H is manufacturing emulsifier for emulsion polymerizaion and releasing agent or lubricants for extrusion process for polymer such as ABS, PVC, SBR, NBL etc.

Uses	Brand Name	Chemical Description	Application
Emulisifier	ELOFER® FS Series	Fatty acid Potassium salt	ABS
	ELOPLA® AS Series	Alkenyl succinic potassium salt	
	ELOTANT® SL130	Sodium Lauryl Sulfate	PVC
	ELOTANT® LS420	Sodium dodecyl benzene Sulfonate	
	ELOTANT® ESLO2029	Sodium icoso-ethoxylate lauryl ether sulfate	SBL/NBL
	ELOPLA® LEN200S	Sodium dodecyl benzene Sulfonate	
	ELOPLA® KLS200	Linear Alkyl Benzene Sulfonate	
	ELOFAD® TL070	Tallow based fatty acid	SBR/NBR
	ELOFAD® TP series	Tallow based partially hydrogenated fatty acid	
Lubricants	ELOFER® EBS10 /20	Palm based / Tallow based ethylene bis stearamide	ABS
	ELOPLA® PT100	Pentaerythrityl tetra-stearate	PC / PBT
	ELOPLA® OS100	2-Octyldodecyl Stearate	PC



> Certifications



COSMOS

ELOTANT MILCOSIDE 100	ELOTANT MILCOSIDE 301V2
ELOTANT MILCOSIDE 101	ELOTANT MILCOSIDE 302
ELOTANT MILCOSIDE 102NB	ELOTANT MILCOSIDE 303
ELOTANT MILCOSIDE 102ND	ELOTANT MILCOSIDE 303N
ELOTANT MILCOSIDE 102NL	ELOTANT MILCOSIDE 303NF
ELOTANT MILCOSIDE 110	ELOTANT MILCOSIDE 304
ELOTANT MILCOSIDE 200	ELOTANT MILCOSIDE 420N
ELOTANT MILCOSIDE 200v3	ELOTANT MILCOSIDE 430N
ELOTANT MILCOSIDE 210	ELOTANT MILCOSIDE 440N
ELOTANT MILCOSIDE 240HE	ELOPERS CONSPM400
ELOTANT MILCOSIDE 300	ELOPERS CONSPM400V2
ELOTANT MILCOSIDE 301	

DETERGENTS

ELOTANT MILCOSIDE 100	ELOTANT MILCOSIDE 301
ELOTANT MILCOSIDE 101	ELOTANT MILCOSIDE 301V2
ELOTANT MILCOSIDE 102NB	ELOTANT MILCOSIDE 302
ELOTANT MILCOSIDE 102ND	ELOTANT MILCOSIDE 303
ELOTANT MILCOSIDE 102NL	ELOTANT MILCOSIDE 303N
ELOTANT MILCOSIDE 110	ELOTANT MILCOSIDE 304
ELOTANT MILCOSIDE 200	ELOTANT MILCOSIDE 420N
ELOTANT MILCOSIDE 210	ELOTANT MILCOSIDE 430N
ELOTANT MILCOSIDE 240HE	ELOTANT MILCOSIDE 440N
ELOTANT MILCOSIDE 300	ELOPERS CONSPM400



CLEANGREDIENTS

ELOTANT MILCOSIDE 100	ELOTANT MILCOSIDE 301
ELOTANT MILCOSIDE 101	ELOTANT MILCOSIDE 301V2
ELOTANT MILCOSIDE 102NB	ELOTANT MILCOSIDE 302
ELOTANT MILCOSIDE 102ND	ELOTANT MILCOSIDE 303
ELOTANT MILCOSIDE 110	ELOTANT MILCOSIDE 303N
ELOTANT MILCOSIDE 200	ELOTANT MILCOSIDE 304
ELOTANT MILCOSIDE 200N	ELOTANT NUAE1068
ELOTANT MILCOSIDE 210	

BVC-RSPO-20160331-1
Segregation
& Mass Balance System



THANK YOU!