English

starex®

starex®

ABS, ABS Alloys & ASA, PP

LOTTE CHEMICAL

www.lottechem.com (Corporate Website)

LOTTE CHEMICAL

starex®

The world-best Styrene & General Products

ABS, ABS Alloy, ASA, PP

CONTENTS

EXCLUSIVE

EXPERTISE

EXCELLENT

starex® is the styrene product brand of LOTTE CHEMICAL which **provides excellent integrated solutions backed by our exclusive experiences and expertise in materials technology.** starex® provides new experience for new lifestyle and shows various line-ups with high performance breaking away from the uniformity of the general resin at the same time.

Product Portfolio

- **ABS**
  - General
  - Extrusion
  - Flame Retardant
  - Heat Resistant
  - Metal Plating/ Painting
- **ABS Alloy**
  - Transparent
  - Reinforced
- **Specialty**
  - Weather Resistant
  - Heat Resistant PP
  - Luminous
  - Anti-microbial & Anti–viral
  - Medical
  - Eco-friendly

General ABS

[excellent balance of material properties]

Key Features

- Flowability
- Heat stability
- Surface quality
- Balanced material properties

PRODUCT LINE-UP

- **General**
  - SD-0150
  - SD-0150 U
  - SD-0150GP
  - HP-0500
  - HG-0760GP
- **High Flow**
  - **General**
    - HF-0660I
  - **High Flow**
    - HF-0670
    - HF-0680
- **High Impact**
  - **High Impact**
    - SD-0170HX
  - **Super High Impact**
    - SD-0190HX
- **Chemical Resistant**
  - EG-0763
  - EG-0191F
- **FOOD CONTACT**
  - FP-0140P (NSF 42)
- **Low Gloss**
  - **General**
    - SL-0100
  - **High Flow**
    - SL-0620
- **Antistatic**
  - EA-0640

Applications

- HA
- E&E
- Automotive Exterior
- Motorcycle (Bike)
- Sundries Stationery, Toy

Extrusion ABS

The World best

[Thin-wall vacuum moldability]

Key Features

- Thin-wall vacuum forming capability
- Gloss surface
- Impact strength
- Chemical & Crack resistance

PRODUCT LINE-UP

- **Refrigerator**
  - SV-0157
  - QU-0191 S (Thin-wall)
  - SQ-0195 (Improvement of Moldability)
- **Industrial**
  - **General**
    - SH-0160
    - SV-0167
    - HE-0175
  - **UV Resistant**
    - SV-0165 U
    - HE-0177U* (UV, High Impact)
- **Pipe**
  - **High Impact**
    - SP-0170
  - **Pressure Resistant**
    - SP-0180

* Under Development

Applications

- Refrigerator inner
- Construction material
- Pipe

Flame Retardant ABS

[Flame retardant solutions]
with material property balance

Key Features

Flammability · Heat stability · Processability · Colorability

PRODUCT LINE-UP

- **TBBA**
  - **1.5mm V-0**
    - VH-0816
  - **2.0mm V-0**
    - VH-0815
  - **2.5mm V-0**
    - VH-0810 T
- **Non-TBBA**
  - **1.5mm V-0**
    - VE-0800
    - VE-0856 (2.0mm 5VB, 3.0mm 5VA, RTI 80°C)
    - VE-0860 (2.5mm 5VB, RTI 95°C)
    - VE-0870 (2.0mm 5VA)
    - VE-0871 (2.0mm 5VA)
    - VE-0880* (1.5mm 5VA)
    - VE-0873EX (2.0mm, 5VA, Extrusion)
  - **2.0mm V-0**
    - VE-0815
  - **2.5mm V-0**
    - VE-0800 T
  - **2.0mm V-0**
    - VE-0815
    - VE-0865 (2.5mm 5VA)
  - **2.1mm V-0**
    - VE-0858
  - **2.5mm V-0**
    - VE-0810
  - **3.0mm V-2**
    - VE-0865EL (Extrusion)
- **Non-Halogen**
  - **1.0mm V-2**
    - NH-0927

* Under Development

Applications

HA
Washing machine, Refrigerator, Air-conditioner

E&E

OA machine
Printer, Copier

Wiring device

Heat Resistant ABS

[Heat resistant solutions]
with excellent quality and stability

Key Features

Heat resistance · Flowability, Processability · Chemical resistance · Low TVOC

PRODUCT LINE-UP

- **Injection**
  - **Semi Heat Resistant**
    - **General**
      - SR-0300 (VST100)
    - **Low Gloss**
      - SR-0300G
    - **Heat Resistant (Below VST 105)**
      - SR-0310FM
  - **High Heat Resistant**
    - **General**
      - SR-0320 K
    - **Low TVOC**
      - SR-0320LT
      - SR-0320LI
  - **Super Heat Resistant (Over VST 110)**
    - **General**
      - SR-0325
      - SR-0330M
      - SR-0340M
    - **Low TVOC**
      - SR-0325LT
      - SR-0325L
      - SR-0330L
      - SR-0340L
- **Extrusion**
  - **Heat Resistant**
    - BM-0320 E
  - **Blow Molding**
    - BM-0320JK

Applications

Automotive
Interior, Exterior, Lighting

HA

Construction material

Metal Plating /Painting ABS

Excellent [adhesion of metal plating] and [quality reliability]

Key Features

- High adhesion strength, Etching ability
- Gloss retention
- Chemical resistance
- Dimensional stability

Metal Plating / Painting

PRODUCT LINE-UP

Metal Plating

- **High Adhesion Strength**
  - MP-0160 R
- **High Surface Quality**
  - MP-0670
- **High Heat Resistant**
  - MP-0320

Painting

- **General**
  - PT-0180 H
- **High Flow**
  - PT-0180B
- **High Impact**
  - PTB-0183

Applications

- **Automotive** Exterior
- **E&E** TV
- **Bathroom item** Faucet
- **Sundries** Cosmetics container, Dinnerware

Transparent ABS

[Transparent solutions]
replacing glass

Key Features

- Clear transparency
- Impact strength
- Flowability, Processability
- Color stability & consistency

PRODUCT LINE-UP

General

- **General**
  - TX-0520K
  - TX-0520IM (Ice color)
- **High Impact**
  - TX-0540IM (Ice color)
- **High Flow**
  - TX-0550K

Specialty

- **NSF51 Certification**
  - TX-0510F
- **Chemical Resistant**
  - TX-0520HR
  - TX-0570 (High Impact)
- **Antistatic**
  - TX-0550AT
- **Stiffness**
  - TX-0585

Applications

- **HA** Washing machine, Vacuum cleaner
- **E&E**
- **Sundries** Toys, Dispenser, Food container, Cosmetics container

Reinforced Materials

[Reinforced materials]
with superior stiffness

Key Features

- High stiffness
- Dimensional stability
- Creep resistance

PRODUCT LINE-UP

ABS/GF

- General
  - GF 10% – GR-4010
  - GF 20% – GR-4020
  - GF 30% – GR-4030
- Flame Retardant
  - GF 10% – VG-4910 (1.6mm V-0, 2.5mm 5VA)
  - GF 20% – VG-4920 (1.6mm V-0, 2.0mm 5VA)
    - VG-4920F (High Flow)

SAN/GF

- General
  - GF 10% – GR-5010
  - GF 20% – GR-5021
  - GF 30% – GR-5030*
- Flame Retardant
  - GF 30% – VG-5930 (1.5mm V-0, 2.5mm 5VA)

* Under Development
% Reinforcing Material Content

Applications

- HA: Air-conditioner/ Refrigerator
- B&C: Window Spacer
- E&E
- HVAC

Weather Resistant Materials

[Unchanged surface quality and material property]
in case of various outdoor condition

Key Features

- Weatherability
- Impact strength
- Gloss retention
- Colorability & Color consistency

PRODUCT LINE-UP

ASA

Injection

- High Weatherability
  - WR-9120
- Superior Weatherability
  - WX-9120
  - WX-9130 (High Impact)
  - WX-9120HT (High Colorability)
  - WX-9120HF (High Flow)
- High Flow
  - WR-9120 J
  - WX-9310J

Extrusion

- Heat Resistant
  - WX-9310UV
  - WX-9310UA
  - WR-9300HF
- High Heat Resistant
  - WX-9330UV
  - WR-9330I
  - WR-9370
  - WX-9320H* (High Stiffness)
- Specialty (ASA/GF)
  - WX-9415H
- Low Gloss
  - WX-9308HF
- High Weatherability
  - WX-9700A
  - WX-9750
- Low Gloss
  - WX-9730L
  - WX-9730LE

ASA/PMMA

- General
  - WX-9950
- High Weatherability
  - WX-9950UV
  - WX-9951UV
- High Impact
  - WX-9950I

* Under Development

Applications

- Automotive Exterior
- Construction Exterior
- Antenna
- HA
- Bathroom item

Heat Resistant PP

[Fire safety solution]
with high flame retardancy

Key Features

- **Flame retardancy (Thin-wall)**
- **Low smoke**
- **Non-halogen**
- **Colorability**

PRODUCT LINE-UP

Non-halogen

- **General(Non-reinforced)**
  - **1.5mm V0 & 5VA**
    - VP-6020NH
    - VP-6020NI (High Impact)
  - **1.5mm V-2**
    - VP-6220N (F1, RTI 125°C)
- **Reinforced**
  - **1.5mm V-2**
    - 10% – VI-6112ND
  - **1.5mm V0 & 5VA**
    - 15% – VI-6120N
  - **0.8mm V0, 1.5mm 5VA**
    - 20% – VI-6220N

% Reinforcing Material Content

Applications

- **HA**
  Washing machine, Refrigerator, Drying machine
- **E&E**

SPECIALTY

Luminous

PRODUCT LINE-UP

- **General**
  - LX-0760
- **High weatherable ASA**
  - LX-9140
- **High Luminance**
  - XM-0900 (Extrusion)
  - LM-0780 (Injection)

Key Features

- **Fine exterior**
  Metallic-look, Emotional feeling
- **Eco-friendly process**
  No painting, No solvent use

Anti-microbial & viral Materials

Anti-microbial evermoin
Anti-viral everban

PRODUCT LINE-UP

- **Anti-microbial**
  - ABF-0200E
  - ABF-0281 (Flame Retardant)
- **Anti-viral**
  - VB-0200

Key Features

- **Anti-microbial & viral property**
- **Weatherability**
- **Satisfy international safety requirement**
  EPA/FDA

Medical Materials

PRODUCT LINE-UP

- **General**
  - MR-0130
  - ML-0750 (CFDA)
- **Transparent**
  - TX-0520ML (CFDA)

Key Features

- **Biocompatibility**
- **Chemical resistance**
- **Color & Property stability**
  After sterilization (γ-ray, EtO)

Applications

- **HA**
  Washing machine, Refrigerator, Drying machine
- **E&E**
  TV
- **Automotive**
  Interior
- **HA**
  Washing machine, Humidifier, Water purifier
- **Sundries**
  General consumer goods, Bathroom items
- **Medical device**
  Drop spike, Infusion filter

Luminous | Anti-microbial & Anti-viral Materials | Medical Materials

Eco-friendly Materials

Various eco-friendly line-ups based on
[Circular eco-system process]

Key Features

Eco-friendly
Sustainable plastic resource circulation

PRODUCT LINE-UP

Mechanical Recycling

- **General ABS**
  - GC-0735C (35%)
  - GC-0755 (50%)
  - GC-0780* (85%)
- **Heat Resistant ABS**
  - GC-0320 (VST 106°C) (20%)
  - GC-0320S (VST 106°C) (50%)
  - GC-0320LI (VST 107°C) (20%)
  - GC-0325LW (VST 110°C) (20%)
  - GC-0332L (VST 115°C) (20%)
- **ABS/PET**
  - GC-0703 (15%)
  - GC-0700 (28%)
  - GC-0730 (40%)

Depolymerization Recycling

- **General ABS**
  - GC-0620T (20%)
- **Transparent ABS**
  - GV-0510 (20%)
  - GV-0520 (35%)

Eco-friendly Naphtha (Pyrolysis/Bio recycling)

- Available for all grades (~100%)

* Under Development
% Recycled Material Content

Applications

Automotive | **E&E** | **HA** Washing machine, Refrigerator, Air-conditioner | **Sundries** | **Mobile** | **OA device** Printer, Copier

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CONTENTS OF PRODUCT SELECTION GUIDE

Test Method and Unit

	Properties		Test Method	Unit
ASTM	Physical	Specific Gravity	ASTM D792	-
		Melt Flow Index	ASTM D1238	g/10min
		Mold Shrinkage	ASTM D955	%
	Mechanical	Tensile Strength at Yield	ASTM D638	kgf/cm²
		Flexural Strength	ASTM D790	kgf·cm/cm
		Flexural Modulus	ASTM D790	kgf·cm/cm
		Izod Impact Strength (Notched)	ASTM D256	kgf·cm/cm
		Rockwell Hardness	ASTM D785	-
	Thermal	Heat Deflection Temperature	ASTM D648	°C
	Appearance	Yellow Index	ASTM D1925	-
	Optical	Transmissivity	ASTM D1003	%
		Haze	ASTM D1003	%
	Flame	Flammability	UL94	mm

	Properties		Test Method	Unit
ISO	Physical	Melt Flow Index	ISO 1133	g/10min
	Mechanical	Tensile Strength at Yield	ISO 527	MPa
		Flexural Strength	ISO 178	MPa
		Flexural Modulus	ISO 178	MPa
		Izod Impact Strength (Notched)	ISO 180 1A	KJ/m²
		Charpy Impact Strength (V-notched)	ISO 179 1eA	KJ/m²
		Rockwell Hardness	ISO 2039-2	-
	Thermal	Heat Deflection Temperature	ISO 75-2	°C
		VICAT Softening Temperature	ISO 306	°C

※ For detailed product specifications, please refer to our company's product website.

General Purpose ABS

	Properties		Condition	General				
				SD-0150	SD-0150 U	SD-0150GP	HP-0500	HG-0760GP
ASTM	Physical	Specific Gravity	-	1.04	1.04	1.04	1.05	1.04
		Melt Flow Index	200°C, 5kg	2	1.7	1.8		4
			220°C, 10kg		20		16	
		Mold Shrinkage	Flow at 3.2mm(MD)	0.2-0.5	0.2-0.5			0.35~0.43
			X-Flow at 3.2mm(TD)	0.2-0.5	0.2-0.5			0.37~0.45
	Mechanical	Tensile Strength at yield	5mm/min	420	410	360	480	400
			50mm/min					
		Flexural Strength	2.8mm/min	630	590	590	700	600
		Flexural Modulus	2.8mm/min	21,000	21,000	21,000	23,000	20,000
		Izod Impact Strength	(notched) 1/4inch at 23°C	22	24	28	13	23
			(notched) 1/8inch at 23°C	35	29		13	24
		Rockwell Hardness	R-scale	109	108	105	114	108
	Thermal	Heat Deflection Temperature	18.56kgf/cm^2, 6.4mm	84	83		91	82
			4.6kgf/cm^2, 6.4mm		95		99	
	Appear-ance	Yellow Index	3.2mm		18			
	Flame	Flammability	HB				2	
ISO	Physical	Melt Flow Index	200°C, 5kg	2.0	1.7	1.8		4.0
			220°C, 10kg		20		16	
	Mechanical	Tensile Strength at yield	50mm/min	51	41	35	40	40
		Flexural Strength	2mm/min	76	59	65	60	60
		Flexural Modulus	2mm/min	2,500	2,100	2,200	2,200	2,000
		Izod Impact Strength	(notched) at 23°C, 4mm	21	24	21	13	23
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	24	28	25	14	20
		Rockwell Hardness	R-Scale	109	108	105	114	108
	Thermal	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm		78	79	82	76
			0.45MPa, 4.0mm		91	90	96	88
		Heat Deflection Temperature (Annealing)	1.8MPa, 4.0mm			95		93
			0.45MPa, 4.0mm			99		98
		VICAT Softening Temperature	B/50	99	98	97	100	96
			B/120			99		

High Flow			High Impact		Chemical resistance		FOOD CONTACT	Low Gloss		Antistatic
HF-0660I	HF-0670	HF-0680	SD-0170HX	SD-0190HX	EG-0763	EG-0191F	FP-0140P	SL-0100	SL-0620	EA-0640
1.04	1.04	1.04	1.02	1.02	1.04	1.04	1.04	1.03	1.04	1.05
3.3	4.5	5.5					1.5		2	1.8
			8	5	12	15		9		
	0.3~0.6		0.3~0.7	0.3~0.7	0.4~0.6	0.3-0.6	0.3-0.6	0.4-0.7		
	0.3~0.6		0.3~0.7	0.3~0.7	0.4~0.6	0.3-0.6	0.3-0.6	0.4-0.7		
400	380	420	370	380	390	440	410		320	450
								330		
600	580	630	600	580	550	630	620	450	480	750
22,000	21,000	21,000	18,800	18,000	20,000	23,000	21,000	16,000	16,000	26,000
19	19	20	40	45	26	24	22	6		19
	21		50	54	32			7	18	
109	108	107	90	92	100	98	106	97	90	95
	85	85			84					81
										96
	1.5, 3.0	2						1.5, 3.2	1.5, 3.0	
3.3	4.5	5.5					1.5		2.0	1.8
			8	4.5	12	15		9		
39	42	40	35	36	36	35	40	35	34	40
63	68	60	60	58	55	50	60	57	54	
2,000	2,400	1,900	1,800	1,800	2,000	2,000	2,200	1,800	1,700	2,200
20	18	20				28	20	12	26	22
21	20	18	35	48	29	30	21	11	24	27
111	109	107	88	92	103	98	106	93	91	95
74	74				76				70	78
86					90					91
94	94	97	91	94	95	98	96	97	92	97
								100		100

Flame Retardant ABS

Product Selection Guide

	Properties		Condition	TBBA			Non TBBA												Non-halogen
				VH-0816	VH-0815	VH-0810T	VE-0800	VE-0856	VE-0860	VE-0870	VE-0871	VE-0873EX	VE-0815	VE-0815	VE-0865	VE-0858	VE-0810	VE-0865EL	NH-0927
ASTM	Physical	Specific Gravity	-	1.16	1.15	1.15	1.16	1.16	1.17	1.16	1.17	1.18	1.15	1.15	1.17	1.15	1.15	1.14	1.05
		Melt Flow Index	200°C, 5kg	4.5	3.8	6.5	3.7	3.5	1.6	7.0	4.0		4.0	4.0		3.5	5.0		3.5
			220°C, 10kg	45							40	10			40			5	
		Mold Shrinkage	Flow at 3.2mm(MD)	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.40-0.49	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.4~0.7	0.3~0.6
			X-Flow at 3.2mm(TD)	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.43-0.53	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.3~0.6	0.4~0.7	
	Mechanical	Tensile Strength at Yield	5mm/min	400	400	370	410	400	440	410	430	410	420	420	420	400	410	420	550
			50mm/min																
		Flexural Strength	2.8mm/min	650	600	600	550	540	650	630	600	650	560	560	650	550	550	620	670
		Flexural Modulus	2.8mm/min	23,000	22,000	22,000	19,500	20,000	23,000	22,000	22,000	23,000	19,000	19,000	22,000	19,000	18,000	19,000	26,000
		Izod Impact Strength	(notched) 1/4inch at 23°C	13	25	20	19	17	14	13	17	11	20	20	15	20	17	33	16
			(notched) 1/8inch at 23°C	20		27		18	15	15		16				21			18
		Rockwell Hardness	R-scale	100	100	103	97	96	104	100		101	96	96	106	92	96	97	110
	Appearance	Heat Deflection Temperature	18.56kgf/cm^2, 6.4mm	77	77	70	80	80	85	88	81		80	80		70	78		88
			4.6kgf/cm^2, 6.4mm					101	98							100			94
	Flame	Flammability	V-2																1.0, 3.0
			V-1		1.5													3	
			V-0	1.5	2	2.5	1.5	1.5	1.5, 2.5-2.7	1.5	1.5	1.5	2	2	2	2	2.5		
			5VB	2	2			2.0	2.5-2.7	2	2	2				2.5			
			5VA	2.5				3.0		2	2	2				2.5			

ISO	Physical	Melt Flow Index	200°C, 5kg	4.5	4.2	6.5	3.7	3.5	1.6	7	4		4		4		3.5	5		3.6
			220°C, 10kg	45							40	10				40			5	
	Mechanical	Tensile Strength at Yield	5mm/min					43	45								42			
			50mm/min	40	45	41	40			35	43		40		40	45		40	43	50
		Flexural Strength	2mm/min	65	71	62	62	66	66	60	65		60		60	75	65	62	64	78
			28mm/min																	
		Flexural Modulus	2mm/min	2,300	2,400	2,100	2,000	2,238	2,350	2,200	2,200		2,000		2,000	2,600	2,200	1,900	2,000	2,600
		Izod Impact Strength	(notched) at 23°C, 4mm	18.5	19	19	18	25	14	15	17		17		17	15.5	25	18	35	21
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	21	22	20	22	24	16	10	19		20		20	16	25	21	35	21
		Rockwell Hardness	R-Scale	100	104	103	102	96	104	100			102		102	106	95	104	100	112
	Thermal	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm	71	71	67.4		75	85	80	77					76	75			78
			0.45MPa, 4.0mm		81	80		87	98								87			90
		Heat Deflection Temperature (Annealing)	1.8MPa, 4.0mm		79															89
			0.45MPa, 4.0mm		84															85
		VICAT Softening Temperature	B/50	86	86	85	87	90	97	92	91	97	87		87	91	90	87	97	96
			B/120		88												91			99

Heat Resistant ABS

Product Selection Guide

	Properties		Condition	Extrusion		Injection												
				BM-0320E	BM-0320JK	SR-0300	SR-0300G	SR-0310FM	SR-0320K	SR-0320LT	SR-0320LI	SR-0325	SR-0330M	SR-0340M	SR-0325LT	SR-0325L	SR-0330L	SR-0340L
ASTM	Physical	Specific Gravity	-	1.05	1.04	1.05	1.05	1.06	1.06	1.05	1.05	1.06	1.07	1.07	1.06	1.06	1.07	1.07
		Melt Flow Index	220°C, 10kg	3.3	4.5	13	12	20	9	10	6	7.5	3	2.5	4	8	3.5	2.6
		Mold Shrinkage	Flow at 3.2mm(MD)	0.3-0.6	0.3-0.6	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7
			X-Flow at 3.2mm(TD)	0.3-0.6	0.3-0.6	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7
	Mechanical	Tensile Strength at Yield	5mm/min	450						460	400		420					
			50mm/min		430	450	400	440	470			500		430	440	500	520	490
		Flexural Strength	2.8mm/min	620	600	620	500	640	740	700	610		640	640	620			
		Flexural Modulus	2.8mm/min	20,000	20,500	23,000	20,000	21,000	24,000	23,800	20,000		22,510	22,000	21,000			
		Izod Impact Strength	(notched) 1/4inch at 23°C	15	30	23	13	15	17	17	22	12	12	14	12	12	13	9
			(notched) 1/8inch at 23°C	20		30	16	18	19	20	24	15	13	16	15	15	14	11
		Rockwell Hardness	R-scale	105	102	110	100	109	110	113	110	115	113	110	113	115	115	115
	Thermal	Heat Deflection Temperature	18.56kgf/cm^2, 6.4mm	97														
			4.6kgf/cm^2, 6.4mm	107														
	Appearance	Yellow Index	3.2mm										31.2					
	Flame	Flammability	HB					1.5										

ISO	Physical	Melt Flow Index	220°C, 10kg	3.3	4.5	13	12	20	9	10	6	7.5	3	2.5	4	8	3.5	2.6
			250°C, 2.16kg										2					
	Mechanical	Tensile Strength at Yield	50mm/min	44	44	48	36	50	50	50	45	50	48	47	50	48	51	48
		Flexural Strength	2mm/min	70	68	76	50	78	74	80	74	73	78	78	85	75	78	85
		Flexural Modulus	2mm/min	2,300	2,250	2,500	1,800	2,300	2,400	2,500	2,400	2,500	2,350	2,500	2,500	2,400	2,400	2,500
		Izod Impact Strength	(notched)at 23°C, 4mm	20	30	22	18	15	17	18	23	12	14	14	15	13	14	10
		Charpy Impact Strength	(V-notched)at 23°C, 4mm	20	30	23	17	16	17	18	24	12	15	13	15	13	13	11
		Rockwell Hardness	R-Scale	105	102	110	100	109	110	113	110	115	113	110	113	115	115	115
	Thermal	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm	86	84													
			0.45MPa, 4.0mm	98														
		Heat Deflection Temperature (Annealing)	1.8MPa, 4.0mm															
			0.45MPa, 4.0mm															
		VICAT Softening Temperature	B/50	108		102	100	103	106	106	107	115	118	120	113	115	120	126
			B/120					106					119					

Extrusion ABS

Product Selection Guide

	Properties		Condition	Refrigerator			Industrial Use				Pipe	
				SV-0157	QU-0191 S	SQ-0195	SH-0160	SV-0167	HE-0175	SV-0165 U	SP-0170	SP-0180
ASTM	Physical	Specific Gravity	-	1.04	1.04	1.04	1.04	1.03	1.04	1.04	1.04	1.04
		Melt Flow Index	220°C, 10kg	5.5	4.3	4.0	8.0	5.2	8.0	8.2	6.4	6.0
		Mold Shrinkage	Flow at 3.2mm(MD)	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.5~0.6	0.4-0.6	
			X-Flow at 3.2mm(TD)	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.5~0.6		
	Mechanical	Tensile Strength at Yield	5mm/min	430	485	420	360	390	400	400	390	370
		Flexural Strength	2.8mm/min	600	700	650	550	600	620	770	540	550
		Flexural Modulus	2.8mm/min	23,000	24,300	21,000	18,000	20,000	22,800	26,000	17,500	19,000
		Izod Impact Strength	(notched) 1/4inch at 23°C	25	22	25	33	35	30	22	39	38
			(notched) 1/8inch at 23°C	30	27		45	45		25	48	
		Rockwell Hardness	R-scale	108	109	101	101	100	105	109	94	98
	Thermal	Heat Deflection Temperature	18.56kgf/cm^2, 6.4mm	89	91		90	85		88	88	
			4.6kgf/cm^2, 6.4mm	95				95		98		
	Flame	Flammability	HB	1.5-6.0	0.75-3.0		1.5-3.0			1.5, 3.0		

ISO	Physical	Melt Flow Index	220°C, 10kg	5.5	4.3	4	8	5.2	8	8.2	6.4	6
	Mechanical	Tensile Strength at Yield	50mm/min	45	39	40	35	40		45	40	45
		Flexural Strength	2mm/min	65	70	60		65		80	60	65
		Flexural Modulus	2mm/min	2400	2,500	2,000		2,000		2,700	1,900	2,100
		Izod Impact Strength	(notched) at 23°C, 4mm	30	26			33		20	34	36
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	30	26	20	27	35		18	34	38
		Rockwell Hardness	R-Scale	108	108		101	100		109	101	101
	Thermal	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm	80	81			78		81	81	77
			0.45MPa, 4.0mm	90	94			92		94	93	92
		Heat Deflection Temperature (Annealing)	1.8MPa, 4.0mm							99	99	100
			0.45MPa, 4.0mm							103	103	104
		VICAT Softening Temperature	B/50	100	102	100	99	98		100	99	97
			B/120							103		99

Metal Plating/Painting ABS

Product Selection Guide

	Properties		Condition	Metal Plating			Painting		
				MP-0160 R	MP-0670	MP-0320	PT-0180 H	PT-0180B	PTB-0183
ASTM	Physical	Specific Gravity	-	1.04	1.04	1.05	1.04	1.04	1.03
		Melt Flow Index	200°C, 5kg	1.5	2.3		2.3		
			220°C, 10kg			6		33	16
		Mold Shrinkage	Flow at 3.2mm(MD)	0.3~0.6	0.3~0.6	0.3~0.6	0.3-0.6	0.4-0.7	0.3~0.6
			X-Flow at 3.2mm(TD)	0.3~0.6	0.3~0.6	0.3~0.6	0.3-0.6	0.4-0.7	0.3~0.6
	Mechanical	Tensile Strength at Yield	5mm/min	480	450	400	380		370
			50mm/min					430	
		Flexural Strength	2.8mm/min	690	660	630	600		570
		Flexural Modulus	2.8mm/min	23,000	21,500	21,500	20,000		21,000
		Izod Impact Strength	(notched) 1/4inch at 23°C	28	24	25	33	33	34
			(notched) 1/8inch at 23°C			27		35	
		Rockwell Hardness	R-scale	109	108	109	105	102	103

ISO	Physical	Melt Flow Index	200°C, 5kg	1.5	2.3		2.3		
			220°C, 10kg			6		33	16
	Mechanical	Tensile Strength at Yield	50mm/min	49	51	47	42	40	38
		Flexural Strength	2mm/min	68	72	74	66	60	65
		Flexural Modulus	2mm/min	2,300	2,350	2,190	2,100	2,200	2,200
		Izod Impact Strength	(notched) at 23°C, 4mm	26	27	21	32	33	33
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	27	25	22	32	33	33
		Rockwell Hardness	R-Scale	109	108	110	105	102	103
	Thermal	VICAT Softening Temperature	B/50	100	98	106	97	97	97

Transparent ABS

Product Selection Guide

	Properties		Condition	General				Specialty				
				TX-0520K	TX-0520IM	TX-0540IM	TX-0550K	TX-0510F	TX-0520HR	TX-0570	TX-0550AT	TX-0585
ASTM	Physical	Specific Gravity	-	1.09	1.09	1.09	1.08	1.1	1.08	1.08	1.09	1.09
		Melt Flow Index	220°C, 10kg	22	22	18	27	14	10	4	25	7
		Mold Shrinkage	Flow at 3.2mm(MD)	0.4-0.8	0.4~0.8	0.4-0.8	0.4-0.8	0.4-0.8	0.4~0.8	0.4-0.8	0.4-0.8	0.3-0.6
			X-Flow at 3.2mm(TD)	0.4-0.8	0.4~0.8	0.4-0.8	0.4-0.8	0.4-0.8	0.6~0.8	0.4-0.8	0.4-0.8	0.3-0.6
	Mechanical	Tensile Strength at Yield	5mm/min	400	400	420	400	450	400	400	400	520
		Flexural Strength	2.8mm/min	550	550	610	600	600	550	550	620	730
		Flexural Modulus	2.8mm/min	19,000	19,000	20,000	19,500	20,000	19,000	17,000	20,000	23,000
		Izod Impact Strength	(notched) 1/4inch at 23°C	14	14	15	17	14	16	16	14	12
			(notched) 1/8inch at 23°C	15	15	16	18	14	18	18	15	13
		Rockwell Hardness	R-scale	110	110	110	105	110	101	102	100	115
	Thermal	Heat Deflection Temperature	18.56kgf /cm^2, 6.4mm	81	81	81	81	83	75	80		
	Optical	Transmissivity	3.2mm	90	90							
		Haze	3.2mm	2	2							
	Flame	Flammability	HB	1.5, 3.0	1.5~3.0				1.5~3.0			
ISO	Physical	Specific Gravity	220°C, 10kg	22	22	18	27	14	10	4	25	7
	Mechanical	Tensile Strength at Yield	5mm/min				40				30	
			50mm/min	50	50	45		45	50	47		50
		Flexural Strength	2mm/min	72	72	65		70	45	55	62	72
			2.8mm/min				60					
		Flexural Modulus	2mm/min	2,200	2,200	1,900		2,200	2,000	1,700	2,200	2,400
			2.8mm/min				1,870					
		Izod Impact Strength	(notched) at 23°C, 4mm	12	12	13	17	12	15	12		11
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	12	12	14	15	12	15	13	13	11
		Rockwell Hardness	R-Scale	110	110	110	106	110	101	102	100	114
	Thermal	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm	75	75	80	73	80	75	80		
			0.45MPa, 4.0mm	85	85							
		VICAT Softening Temperature	B/50		93	90	90	89	86	91	85	94
	Optical	Transmissivity	3.2mm	90	90							
		Haze	3.2mm	2	2				2			

Reinforced ABS

Product Selection Guide

	Properties		Condition	ABS/GF						SAN/GF		
				GR-4010	GR-4020	GR-4030	VG-4910	VG-4920	VG-4920F	GR-5010	GR-5021	VG-5930
ASTM	Physical	Specific Gravity	-	1.15	1.18	1.27	1.12	1.33	1.33	1.14	1.22	1.45
		Melt Flow Index	220°C, 10kg	8	7	5.5	23	25	42	14	8	3
		Mold Shrinkage	Flow at 3.2mm(MD)	0.1-0.3	0.1-0.3	0.1-0.3	0.1-0.3	0.1~0.3	0.1-0.3	0.1-0.3	0.1-0.3	
			X-Flow at 3.2mm(TD)	0.1-0.3	0.1-0.3	0.1-0.3				0.1-0.3	0.1-0.3	
	Mechanical	Tensile Strength at Yield	5mm/min	750	800	1050	750	960	870	900	1,300	1,450
		Flexural Strength	2.8mm/min	1,000	1,100	1,300	800	1,050	1,050	1,100	1,400	1,550
		Flexural Modulus	2.8mm/min	41,000	49,000	79,000	37,000	60,000	58,000	50,000	75,000	95,000
		Izod Impact Strength	(notched) 1/4inch at 23°C	8.5	5.5	6.5	12	5	6.1	4	4	
			(notched) 1/8inch at 23°C	9	6	7.5	7	5	6	5	5	6
		Rockwell Hardness	R-scale	112	112	112	109	110	110			
	Optical	Heat Deflection Temperature	18.56kgf/cm^2, 6.4mm	100	101	103	97	96	93	104	105	105
			4.6kgf/cm^2, 6.4mm	106	107	108	102	101	100			
	Flame	Flammability	HB	1.5, 3.0, 6.0	1.5, 3.0, 6.0	1.5, 3.0, 6.0				1.5, 3.0	1.5, 3.0	
			V-0					1.6				1.5
			5VB									2.5
			5VA					2				2.5

ISO	Physical	Specific Gravity	220°C, 10kg	8	7	5.5	23	25	41	14	8	3
	Mechanical	Tensile Strength at Yield	5mm/min	78	85	105						
			50mm/min				85	100	102	90	118	100
		Flexural Strength	2mm/min	110	120	150	100	130	146	130	160	160
		Flexural Modulus	2mm/min	4,100	5700	8,300	4,100	7,100	7,100	5,500	7,700	11,000
		Izod Impact Strength	(notched) at 23°C, 4mm	10	8	9	7	7	9.1	4	5	7
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	10	8	9	7	7	9.2	4	5	8
		Rockwell Hardness	R-Scale	112	112	112	109	115	116			
	Optical	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm	100	101	103	92	95	95	104	105	105
			0.45MPa, 4.0mm	106	107	108	101	101	100			
		Heat Deflection Temperature (Annealing)	1.8MPa, 4.0mm				97					
			0.45MPa, 4.0mm				101					
		VICAT Softening Temperature	B/50	106	107	108	99	101	102	106	108	108
			B/120	108	110	112			104			

Weather Resistant Material

	Properties		Condition	Injection							
				WR-9120	WX-9120	WX-9130	WX-9120HT	WX-9120HF	WR-9120 J	WX-9310J	WX-9310UV
ASTM	Physical	Specific Gravity	-	1.06	1.06	1.06	1.07	1.07	1.07	1.07	1.08
		Melt Flow Index	220°C, 10kg	17	16	3	18	39	26	21	6
		Mold Shrinkage	Flow at 3.2mm(MD)	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.4-0.7
			X-Flow at 3.2mm(TD)	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.4-0.7
	Mechanical	Tensile Strength at Yield	5mm/min	480	460	440	370	400	450	440	440
			50mm/min								
		Flexural Strength	2.8mm/min	680	650	600	560	600	650	680	680
		Flexural Modulus	2.8mm/min	22,000	21,000	19,000	16,400	19,000	21,000	22,000	22,000
		Izod Impact Strength	(notched) 1/4inch at 23°C		10				9	8	9
			(notched) 1/8inch at 23°C	20	18	50	18	12	28	11	18
		Rockwell Hardness	R-scale	106	104	98	97	108	105	106	105
	Thermal	Heat Deflection Temperature	18.56kgf/cm^2, 6.4mm	83	82		81	75			
			4.6kgf/cm^2, 6.4mm		92			85			
	Flame	Flammability	HB	1.5	1.5						
ISO	Physical	Melt Flow Index	220°C, 10kg	17	16	3	18	39	26	21	6
	Mechanical	Tensile Strength at Yield	5mm/min								
			50mm/min	47	43	45	35	40	45	48	49
		Flexural Strength	2mm/min	67	67	65	65	65	70	75	70
		Flexural Modulus	2mm/min	2,100	2,100	2,000	2,100	2,000	2,250	2,300	2,400
		Izod Impact Strength	(notched) at 23°C, 4mm	11	18		15	12	12		16
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	16	12	14	12	10	14	12	14
		Rockwell Hardness	R-Scale	106	104	98	98	108	105	107	106
	Thermal	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm	72	77		72	75			
			0.45MPa, 4.0mm	90	88			85			
		VICAT Softening Temperature	B/50	98	97	95	89	95	98	98	101
			B/120								103

Injection							Extrusion				ASA/PMMA			
WX-9310UA	WR-9300HF	WX-9330UV	WR-9330I	WR-9370	WX-9415H	WX-9308HF	WX-9700A	WX-9750	WX-9730L	WX-9730LE	WX-9950	WX-9950UV	WX-9951UV	WX-9950I
1.08	1.07	1.09	1.07	1.07	1.16	1.07	1.07	1.07	1.06	1.06	1.12	1.16	1.15	1.09
7	12	4	5	3	4	12	5	4	3	3.5	6	5	6	7.5
0.4-0.7	0.3-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.2~0.4	0.4-0.7	0.3-0.6	0.3-0.6	0.6-0.8	0.6-0.8	0.4-0.7	0.4-0.7	0.4-0.8	0.4-0.7
0.4-0.7	0.3-0.7	0.4-0.7	0.4-0.7		0.2~0.4	0.4-0.7	0.3-0.6	0.3-0.6	0.6-0.8	0.6-0.8	0.4-0.7	0.4-0.7	0.4-0.8	0.4-0.7
440	450	450	480	500	600		400	410	320	330				
						450					500	640	550	470
660	680	640	710	710	880	680	600	570	420	420	700	780	700	650
20,500	22,000	21,000	23,000	23,000	39,000	22,000	19,000	18,000	14,000	14,100	20,000	23,000	21,000	21,000
	10	8				10			11		7	4	5.5	
18	15	22	14	15	12	13	50	53	30	25	7	4	5.5	10
100	106	103	107	106	99	109	95	95	75	80	108	118	112	108
					96			72	73	73				
								87	80	80				
7	12	4	5	3	4	12	5	4	3	3.5	6	5	6	7.5
		45												
49	44		52	49	58	45	40		27	28	46	65	58	50
70	67	73	80	70	95	75	60	62	47	46	68	90	80	70
2,200	2,100	2,300	2,400	2,160	4,100	2,300	2,100	1,950	1,550	1,500	2,100	2,600	2,300	2,200
	12			9		11		41				4	5.5	
14	13	13	10	13	10		33	32	18	20	7	4	5.5	10
100	106	103	108	106	97	109	95	95	70	78	107	118	112	105
					91			77	72	73				
								88	79	79				
101	100	103	104	109	96	103	97	94	83	84	96	102		97

Eco-friendly Materials & SPECIALTY

	Properties		Condition	Mechanical Recycling					
				GC-0735C	GC-0755	GC-0703	GC-0700	GC-0730	GV-0510
ASTM	Physical	Specific Gravity	-	1.04	1.04	1.07	1.1	1.12	1.09
		Melt Flow Index	200°C, 5kg	4					
			220°C, 10kg		40				19
		Mold Shrinkage	Flow at 3.2mm(MD)	0.3~0.6		0.3-0.8	0.6-0.8	0.6-0.8	0.4-0.8
			X-Flow at 3.2mm(TD)	0.3~0.6		0.3-0.8	0.6-0.8	0.6-0.8	0.4-0.8
	Mechanical	Tensile Strength at Yield	5mm/min		410				450
			50mm/min	370		400	460	400	
		Flexural Strength	2.8mm/min	600	600	520	630	550	550
		Flexural Modulus	2.8mm/min	22,000	23,000	17,000	19,000	17,000	19,000
		Izod Impact Strength	(notched) 1/4inch at 23°C	20	23	17	16	12	13
			(notched) 1/8inch at 23°C	25	27	30	30	57	14
		Rockwell Hardness	R-scale	106		94	95	90	113
	Thermal	Heat Deflection Temperature	18.56kgf/cm^2, 6.4mm	84		70	80	74	81
			4.6kgf/cm^2, 6.4mm			80	89	89	
	Flame	Flammability	HB	1.0-2.99		1.5,3.0	1.5,3.0	1.5, 3.0	
			V-0						
ISO	Physical	Melt Flow Index	200°C, 5kg	4					
			220°C, 10kg		40				19
	Mechanical	Tensile Strength at Yield	5mm/min						
			50mm/min	38	38	40	37	40	40
		Flexural Strength	2mm/min	58	62	50	56	55	70
		Flexural Modulus	2mm/min	2,200	2,200	1,900	1,800	1,700	2,000
		Izod Impact Strength	(notched) at 23°C, 4mm	20		15	12	35	11
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	24	25	15	13	13	12
		Rockwell Hardness	R-Scale	106		94	95	90	113
	Thermal	Heat Deflection Temperature (Unannealed)	1.8MPa, 4.0mm	74	74	70	71	71	
			0.45MPa, 4.0mm			80	83	83	
		Heat Deflection Temperature (Annealing)	0.45MPa, 4.0mm	96					
		VICAT Softening Temperature	B/50		96	91	91	91	89

Depolymerization		Non-painting LUMINOUS				Anti-viral			Medical		
						evermoin		everban			
GV-0520	GC-0620T	LX-0760	LX-9140	XM-0900	LM-0780	ABF-0200E	ABF-0281	VB-0200	MR-0130	ML-0750	TX-0520ML
1.09	1.07	1.04	1.06	1.09	1.07	1.05	1.18	1.15		1.04	1.09
		3.2			5	4	5			4	
20	20		3	4.5					40		22
0.4-0.8	0.3-0.6	0.3-0.6	0.44-0.53	0.3-0.6	0.3 ~ 0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3 ~ 0.6	0.4-0.8
0.4-0.8	0.3-0.6	0.3-0.6	0.46-0.57	0.3-0.6	0.3 ~ 0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3 ~ 0.6	0.4-0.8
450	380		430	500	450	380			410	410	440
		420					400	350			
550	600	610	580	700	730	610	550	500	630	650	600
19,000	21,000	21,000	19,000	22,000	27,000	22,000	21,000	17,000	22,000	23,000	20,000
13	23	14	6	7	6	20	8		18	22	13
14	24	14	10	8	7			20	21	23	14
113	104	107	96	110	108	106		90	109	111	112
81	78	85	84	83	85			80			80
		94	96	92							
	1.5/3.0				1.5/3.0						
							2				
		3.2			5	4	4			4	
20	20		3	4.5					40		22
									35		
40	43	45	45	50	47	30	45			45	42
70	70	72	66	75	78	60	60		50	74	50
2,000	2,100	2,400	2,000	2,100	2,800	2,100	2,100		2,100	2,400	1,900
11		17	6	6	6	18	8			16	11
12	19	19	9	6		20	9		10	19	12
113	105	107	96	113	112	106	106		109	110	112
		77	77	75	75						
			91	83							
89	90	96	95	98	96	94	87		93	94	90

Flame Retardant PP

Product Selection Guide

	Properties		Condition	Non-halogen					
				VI-6112ND	VI-6120N	VI-6220N	VP-6020NH	VP-6020NI	VP-6220N
ASTM	Physical	Specific Gravity	-	0.96	1.13	1.22	1.01	1.02	0.93
		Melt Flow Index	230°C, 2.16kg	23	10	5	11	6	10
		Mold Shrinkage	Flow at 3.2mm(MD)	1.3-1.6	1.0-1.2	0.4-0.7	1.0-1.3	1.2-1.5	1.4-1.8
			X-Flow at 3.2mm(TD)	1.4-1.7	1.1-1.3	0.5-0.8	1.1-1.4	1.3-1.6	1.3-1.6
	Mechanical	Flexural Strength	50mm/min	330	200	650	200	140	260
		Flexural Modulus	2.8mm/min	390	210	850	300	210	280
		Flexural Modulus	2.8mm/min	16,000	14,000	49,000	15,000	9,900	9,700
		Izod Impact Strength	(notched) 1/4inch at 23°C	3.5	3.5	6	4	14	9.5
			(notched) 1/8inch at 23°C	3.5		6	4	14	9
	Thermal	Heat Deflection Temperature	4.6kgf/cm^2, 6.4mm	130	118	160	120	137	120
	Flame	Flammability	V-2	1.5-3.0					1.5-3.0
			V-0		1.5-3.0	0.8-3.0	1.5-3.0	1.5-3.0	
			5VB		1.5, 3.0		1.5-3.0		
			5VA		1.5, 3.0	1.5, 3.0	1.5-3.0		
ISO	Physical	Melt Flow Index	230°C, 2.16kg	23	10	5	11	6	10
	Mechanical	Tensile Strength at Yield	50mm/min	30	20	65	20	15	25
		Flexural Strength	2mm/min	40	25	85	30	23	30
		Flexural Modulus	2mm/min	1,500	1,500	4,900	1,500	1,000	1250
		Izod Impact Strength	(notched) at 23°C, 4mm	4.2		5.5		10	
		Charpy Impact Strength	(V-notched) at 23°C, 4mm	3.5	2	5.5	4		9.5
	Thermal	Heat Deflection Temperature (Unannealed)	0.45MPa, 4.0mm		120	160	120	135	110

A global group creating a better Life for all, LOTTE endeavors to Realize this ambitious dream.

MISSION

We enrich people's lives by Providing superior products And services that Our customers love Ans trust.

VISION

Lifetime Value Creator

About LOTTE CHEMICAL

LOTTE Chemical's technologies help to enrich our daily lives.

Field of Business

Basic Chemicals

- Basic/Intermediate Petrochemicals: Ethylene, Propylene, BD, SM, OX, C5
- Polymer: PE, PP, PET
- Monomer: EO/EG/GE, EOA, PIA/PTA/MMA

Advanced Materials

- High Performance Plastic Materials
  - Styrex Styrene & general product: ABS, ABS Alloy, ASA, PP
  - INFINO Enginnering plastics: PC, PC Alloy & High Performance EP
  - Perfomance materials: PP Compound, TPE, Modified adhesive resin, LFT, EPP
- Construction Materials: Acrylic solid surface, Engineered stone, Porcelain surface

Capacity

(Unit : KTA)

BASIC CHEMICALS

EL	4,513
PL	1,697
BD	540
BZ	766
TL	339
MX	139

POLYMER

HDPE	1,602
LLDPE	490
LDPE/EVA	360
PP	1,823
PET	520
ABS	760
PC	480

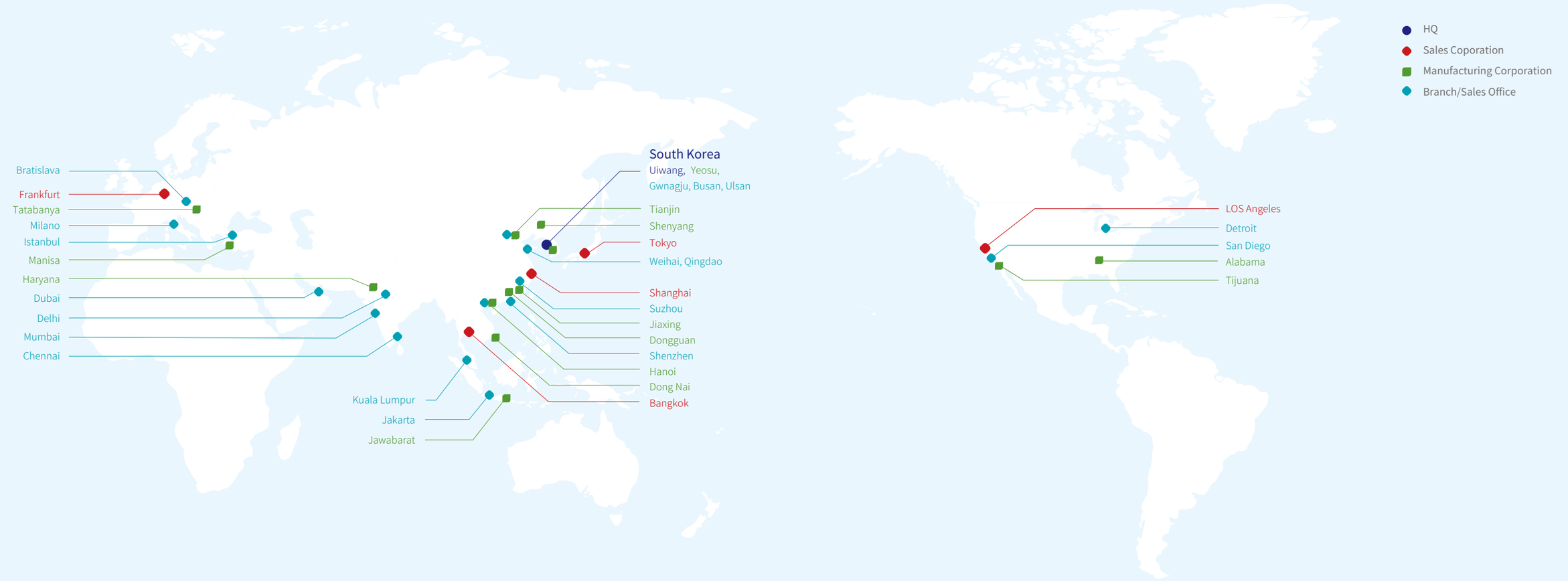
MONOMER

EG	1,830
SM	577
PX	750
OX	210
Me-X	360
PIA	520

SPECIALTY

EPDM	96
MMA	237
PMMA	110
S-SBR	100
EOA	430
Acrylic solid surface	97k sheets
Engineered stone	42k sheets

Global **Network** [Advanced Materials]



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