

# Polycarbonate film for optical use FS Grade

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 **mitsubishi GAS CHEMICAL COMPANY, INC.**

Specialty Chemicals Business Sector

Engineering Plastics Division

Performance Products Department

- **FS Grade has great appearance due to the material design by MGC and extrusion molding technology by MGC Filsheet Co., Ltd.**
- **This grade can be used for optical parts. It is manufactured with improved thickness accuracy and surface appearance and retardation value.**
- **Molded with mirror-finished metal rolls, the surface defects or distortion are decreased.**
- **If you want the slit products or sheet type products, please contact US.**

**\* : Compared with our grade “FE-2000”**

# FS Grade Line up

Grade	Masking film	Thickness	Width (Within guarantee)	Length	Product form
FS-2000L	Both side One side	100μm	1,240mm	1,300m	Roll
		200μm		900m	
		300μm		660m	
		400μm		500m	
		500μm		420m	

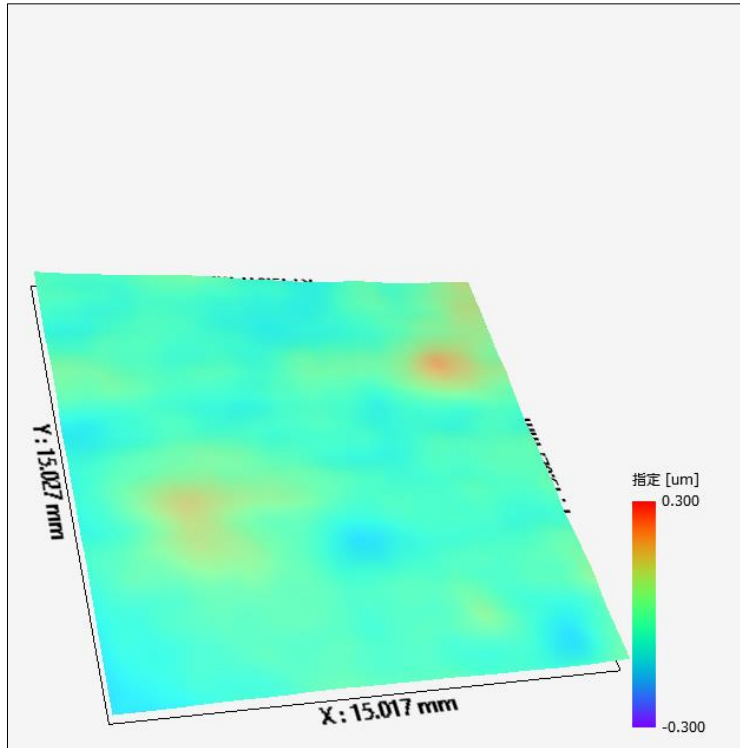
# FS Grade property -typical data-

		FS-2000L	FE-2000 (Reference)	Test method
Thickness	Dispersion data	± 5~3%	± 10~8%	JIS K 6735
Light transmission rate		92%	91%	JIS K 7361-1
HAZE		0.2%	0.5%	JIS K 7136
Retardation	R(0°)	10~40nm*1	Uncontrolled (30~180nm)	Luceo Co., Ltd LSM-9000 wavelength : 580nm
180°C heat shrinkage	100µm	3~7%	1~5%	Placing the film in a thermostatic bath at 180°C for 30min, then cool and measure.
Appearance (impurity number)	size 0.03~0.3mm <sup>2</sup>	5~15 /m <sup>2</sup>	5~30 /m <sup>2</sup>	Visual inspection
Surface state		Flat surface due to mirror-finished roll	Die line and distortion due to open mold	

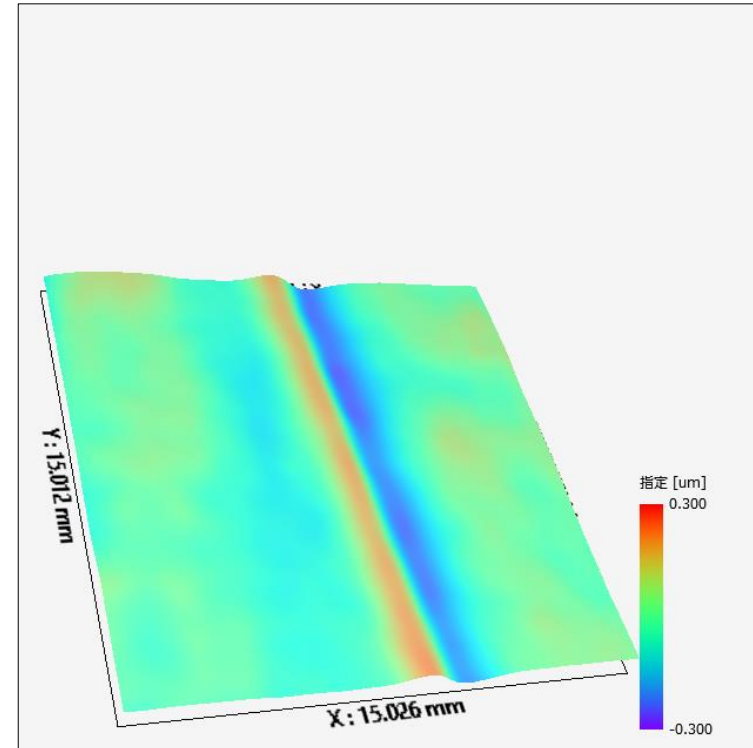
Values on the above chart are for reference, not guaranteed.

\*1 : If you need the product with retardation under 10nm, please contact us.

## FS-2000L



## FE-2000 (Areas around the die line)



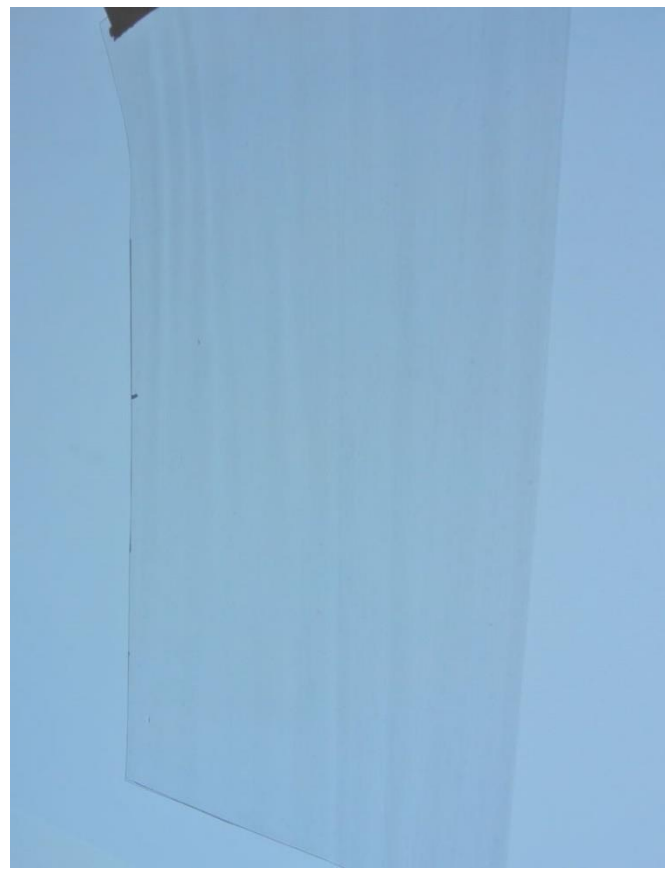
Those images were observed with a white interference microscope.

# FS Grade property -surface state-

**FS-2000L**



**FE-2000**



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If you would like to contact us, please use the following QR code to fill out the inquiry form.



Click or read the QR code above!